15 May 2003

ISSN 0022-328X

Journal of Organometallic Chemistry

THE 2002 ANNUAL INDEXES

Also available on

SCIENCE DIRECT®

www.sciencedirect.com

ELSEVIER

On-line Access via:
www.elsevier.com/locate/jorganchem

JOURNAL OF ORGANOMETALLIC CHEMISTRY

Editors
R.D. Adams *(Columbia, SC, USA)*
G. Bertrand *(Toulouse, France)*
W.A. Herrmann *(Munich, Germany)*
G. van Koten *(Utrecht, The Netherlands)**
G.J. Leigh *(Brighton, UK)**
D.M.P. Mingos *(Oxford, UK)*
K. Tatsumi *(Nagoya, Japan)*

Emeritus Honorary Board
H.C. Brown *(Lafayette, IN, USA)*
F. Calderazzo *(Pisa, Italy)*
G.P. Chiusoli *(Parma, Italy)*
A.G. Davies *(London, UK)*
C. Eaborn *(Brighton, UK)*
E.O. Fischer *(Munich, Germany)*
R.B. King *(Athens, GA, USA)*
M. Kumada *(Osaka, Japan)*
P.M. Maitlis *(Sheffield, UK)*
A. Nakamura *(Osaka, Japan)*
J.F. Normant *(Paris, France)*
P.L. Pauson *(Glasgow, UK)*
M.D. Rausch *(Amherst, MA, USA)*
H. Sakurai *(Chiba, Japan)*
F.G.A. Stone *(Waco, TX, USA)*
M.G. Voronkov *(Irkutsk, Russian Federation)*
H. Werner *(Würzburg, Germany)*
G. Wilke *(Mülheim/Ruhr, Germany)*

Editorial Board
D.A. Atwood *(Lexington KY, USA)*
I.P. Beletskaya *(Moscow, Russian Federation)*
M. Beller *(Rostock, Germany)*
T. Bitterwolf *(Moscow, ID, USA)*
M. Bochmann *(Norfolk, UK)*
U.H.F. Bunz *(Columbia, SC, USA)*
E. Carmona *(Sevilla, Spain)*
M. Chaudret *(Toulouse, France)*
J.-T. Chen *(Taipei, Taiwan)*
R.J.P. Corriu *(Montpellier, France)*
F.A. Cotton *(College Station, TX, USA)*
A.H. Cowley *(Austin, TX, USA)*
Y. Do *(Daejoen, Korea)*
G. Erker *(Muenster, Germany)*
W.J. Evans *(Irvine, CA, USA)*
R.A. Fischer *(Bochum, Germany)*
M.L.H. Green *(Oxford, UK)*
M.G. Humphrey *(Canberra, Australia)*
G. Jaouen *(Paris, France)*
R.F. Jordan *(Chicago, IL, USA)*
H. Kurosawa *(Osaka, Japan)*
M.F. Lappert *(Brighton, UK)*
T.-Y. Luh *(Taipei, Taiwan)*
T.B. Marder *(Durham, UK)*
F. Mathey *(Palaiseau, France)*
K. Matsumoto *(Tokyo, Japan)*
B. Meunier *(Toulouse, France)*
E. Nakamura *(Tokyo, Japan)*
J. Okuda *(Aachen, Germany)*
G.F. Parkin *(New York, NY, USA)*
P.P. Power *(Davis, CA, USA)*
C. Raston *(Leeds, UK)*
H. Suzuki *(Tokyo, Japan)*
G. Süss-Fink *(Neuchâtel, Switzerland)*
K. Tamao *(Kyoto, Japan)*
M. Tanaka *(Tsukuba and Yokohama, Japan)*
T.D. Tilley *(Berkeley, CA, USA)*

* Denotes Subject Reviews Editor or Book Reviews Editor.

Aims and Scope

The *Journal of Organometallic Chemistry* has a long-standing tradition for publishing original papers dealing with theoretical aspects, structural chemistry, synthesis, physical and chemical properties including reaction mechanisms, and practical applications of organometallic compounds.

Because of the growing importance of organometallic complexes in bioorganometallic chemistry and material sciences, on one hand, and of heavier main group elements in organometallic chemistry, on the other hand, the scope of the Journal has been enlarged, and work covering these fields is also considered.

Besides original papers, the *Journal of Organometallic Chemistry* publishes review articles, communications and notes.

Publication information: *Journal of Organometallic Chemistry* (ISSN 0222-328X). For 2003, volumes 665–688 are scheduled for publication. Subscription prices are available upon request from the Publisher or from the Regional Sales Office nearest you or from this journal's website (http://www.elsevier.com/locate/jorganchem). Further information is available on this journal and other Elsevier Science products through Elsevier's website: (http://www.elsevier.com). Subscriptions are accepted on a prepaid basis only and are entered on a calendar year basis. Issues are sent by standard mail (surface within Europe, air delivery outside Europe). Priority rates are available upon request. Claims for missing issues should be made within six months of the date of dispatch.

Orders, Claims, and Product Enquiries
(no manuscript enquiries)
Please contact the Customer Support Department at the Regional Sales Office nearest you:

New York, Elsevier Science, P.O. Box 945. New York, NY 10159-0945, USA. Tel. (+1)212-633-3730. [Toll free number for North American customers: 1-888-4ES-INFO (437-4636)], fax (+1)212-633-3680; e-mail usinfo-f@elsevier.com

Amsterdam, Elsevier Science, P.O. Box 211, 1000 AE Amsterdam, The Netherlands. Tel. (+31)20-485-3757; fax (+31)20-485-3432; e-mail nlinfo-f@elsevier.com

Tokyo, Elsevier Science, 9–15 Higashi-Azabu, 1-chome Minato-ku, Tokyo 106, Japan. Tel. (+81)3-5561-5033; fax (+81)3-5561-5047; e-mail info@elsevier.co.jp

Singapore, Elsevier Science, 3 Killiney Road, #08-01 Winsland House I, Singapore 239519; Tel.: (+65)6349 0200; fax (+65)6733 1510; e-mail: asiainfo@elsevier.com.sg

Rio de Janeiro, Elsevier Science, Rua Sete de Setembro 111/16 Andar, 20050-002 Centro, Rio de Janeiro-RJ, Brazil. Tel.: (+55) (21) 509 5340; fax: (55) (21) 507 1991; e-mail: elsevier@campus.com.br [Note (Latin America): for orders, claims and help desk information, please contact the Regional Sales Office in New York as listed above]

US mailing notice: Journal of Organometallic Chemistry (ISSN 0222-328X) is published biweekly by Elsevier Science B.V. (P.O. Box 2759, 1000 CT Amsterdam, The Netherlands). Annual subscription price in the USA is US$ 9,901.— (valid in North, Central and South America), including air speed delivery. Periodical postage rate paid at Jamaica, NY 11431.

USA POSTMASTER: Send address changes to Journal of Organometallic Chemistry, Publications Expediting Inc., 200 Meacham Avenue, Elmont, NY 11003. AIRFREIGHT AND MAILING in the USA by Publications Expediting Inc., 200 Meacham Avenue, Elmont, NY 11003.

Journal of Organometallic Chemistry

Supplement (2003)

Journal of Organometallic Chemistry

Supplement (2003)

Editors
R.D. Adams *(Columbia, SC, USA)*
G. Bertrand *(Toulouse, France)*
W.A. Herrmann *(Munich, Germany)*
G. van Koten *(Utrecht, The Netherlands)**
G.J. Leigh *(Brighton, UK)**
D.M.P. Mingos *(Oxford, UK)*
K. Tatsumi *(Nagoya, Japan)*

Emeritus Honorary Board
H.C. Brown *(Lafayette, IN, USA)*
F. Calderazzo *(Pisa, Italy)*
G.P. Chiusoli *(Parma, Italy)*
A.G. Davies *(London, UK)*
C. Eaborn *(Brighton, UK)*
E.O. Fischer *(Munich, Germany)*
R.B. King *(Athens, GA, USA)*
M. Kumada *(Osaka, Japan)*
P.M. Maitlis *(Sheffield, UK)*
A. Nakamura *(Osaka, Japan)*
J.F. Normant *(Paris, France)*
P.L. Pauson *(Glasgow, UK)*
M.D. Rausch *(Amherst, MA, USA)*
H. Sakurai *(Chiba, Japan)*
F.G.A. Stone *(Waco, TX, USA)*
M.G. Voronkov *(Irkutsk, Russian Federation)*
H. Werner *(Würzburg, Germany)*
G. Wilke *(Mülheim/Ruhr, Germany)*

Editorial Board
D.A. Atwood *(Lexington KY, USA)*
I.P. Beletskaya *(Moscow, Russian Federation)*
M. Beller *(Rostock, Germany)*
T. Bitterwolf *(Moscow, ID, USA)*
M. Bochmann *(Norfolk, UK)*
U.H.F. Bunz *(Columbia, SC, USA)*
E. Carmona *(Sevilla, Spain)*
M. Chaudret *(Toulouse, France)*
J.-T. Chen *(Taipei, Taiwan)*
R.J.P. Corriu *(Montpellier, France)*
F.A. Cotton *(College Station, TX, USA)*
A.H. Cowley *(Austin, TX, USA)*
Y. Do *(Daejoen, Korea)*
G. Erker *(Muenster, Germany)*
W.J. Evans *(Irvine, CA, USA)*
R.A. Fischer *(Bochum, Germany)*
M.L.H. Green *(Oxford, UK)*
M.G. Humphrey *(Canberra, Australia)*
G. Jaouen *(Paris, France)*
R.F. Jordan *(Chicago, IL, USA)*
H. Kurosawa *(Osaka, Japan)*
M.F. Lappert *(Brighton, UK)*
T.-Y. Luh *(Taipei, Taiwan)*
T.B. Marder *(Durham, UK)*
F. Mathey *(Palaiseau, France)*
K. Matsumoto *(Tokyo, Japan)*
B. Meunier *(Toulouse, France)*
E. Nakamura *(Tokyo, Japan)*
J. Okuda *(Aachen, Germany)*
G.F. Parkin *(New York, NY, USA)*
P.P. Power *(Davis, CA, USA)*
C. Raston *(Leeds, UK)*
H. Suzuki *(Tokyo, Japan)*
G. Süss-Fink *(Neuchâtel, Switzerland)*
K. Tamao *(Kyoto, Japan)*
M. Tanaka *(Tsukuba and Yokohama, Japan)*
T.D. Tilley *(Berkeley, CA, USA)*

* Denotes Subject Reviews Editor or Book Reviews Editor.

ELSEVIER

Amsterdam — London — New York — Oxford — Paris — Shannon — Tokyo

Advertising information. Advertising orders and enquiries can be sent to: **USA, Canada and South America:** Mr Tino de Carlo, The Advertising Department, Elsevier Science Inc., 360 Park Avenue South, New York, NY 10010-1710, USA; phone: (+1) (212) 633 3815; fax: (+1) (212) 633 3820; e-mail: t.decarlo@elsevier.com. **Japan:** The Advertising Department, Elsevier Science K.K., 9-15 Higashi-Azabu 1-chome, Minato-ku, Tokyo 106-0044, Japan; phone: (+81) (3) 5561 5033; fax: (+81) (3) 5561 5047. **Europe and ROW:** Commercial Sales Department, Elsevier Science Ltd., The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK; phone: (+44) 1865 843016; fax: (+44) 1865 843976; e-mail: media@elsevier.com

Abstracting Organizations
Articles in this journal will be indexed and abstracted in Chemical Abstracts, Chemischer Informationsdienst. Current Abstracts of Chemistry and Index Chemicus, Current Contents, Physical, Chemical and Earth Sciences, Pascal (Centre de Documentation Scientifique et Technique), Research Alert™ and the Science Citation Index.

International Standard Serial Number 0022-328X

© 2003 Elsevier Science B.V. All rights reserved.

This journal and the individual contributions contained in it are protected by the copyright of Elsevier Science B.V., and the following terms and conditions apply to their use:

Photocopying
Single photocopies of single articles may be made for personal use as allowed by national copyright laws. Permission of the Publisher and payment of a fee are required for all other photocopying, including multiple or systematic copying, copying for advertising or promotional purposes, resale, and all forms of document delivery. Special rates are available for educational institutions that wish to make photocopies for non-profit educational classroom use.

Permissions may be sought directly from Elsevier Science via their homepage (http://www.elsevier.com) by selecting "Customer support" and then "Permissions". Alternatively you can send an e-mail to: permissions@elsevier.com, or fax to: (+44) 1865 853333.

In the USA, users may clear permissions and make payments through the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA; phone: (+1) (978) 7508400; fax: (+1) (978) 7504744, and in the UK through the Copyright Licensing Agency Rapid Clearance Service (CLARCS), 90 Tottenham Court Road, London W1P 0LP, UK; phone: (+44) 20 7631 5555; fax: (+44) 20 7631 5500. Other countries may have a local reprographic rights agency for payments.

Derivative Works
Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution. Permission of the Publisher is required for all other derivative works, including compilations and translations.

Electronic Storage or Usage
Permission of the Publisher is required to store or use electronically any material contained in this journal, including any article or part of an article.

Except as outlined above, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the Publisher.

Address permissions requests to: Elsevier Science Global Rights Department, at the mail, fax and e-mail addresses noted above.

Notice
No responsibility is assumed by the Publisher for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of rapid advances in the medical sciences, independent verification of diagnoses and drug dosages should be made.

Although all advertising material is expected to conform to ethical (medical) standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.

⊗ The paper used in this publication meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

Printed in The Netherlands

ELSEVIER

Available online at www.sciencedirect.com

SCIENCE DIRECT®

Supplement, 15 May 2003

Journal of Organometallic Chemistry

www.elsevier.com/locate/jorganchem

Cumulative Indexes of Volumes 641–664

Author Index 1

Subject Index 21

The Publisher encourages the submission of articles in electronic form thus saving time and avoiding rekeying errors. Please refer to the online version of the Guide for Authors at http://www.elsevier.com/locate/jorganchem

SCIENCE DIRECT™

Full text of this journal is available, on-line from **ScienceDirect**. Visit **www.sciencedirect.com** for more information.

CONTENTS Direct

This journal is part of **ContentsDirect**, the ***free*** alerting service which sends tables of contents by e-mail for Elsevier Science books and journals. You can register for **ContentsDirect** online at: **www. elsevier.com/locate/contentsdirect**

http://ChemWeb.com
The World Wide Club for the Chemical Community

http://chemweb.com/gateways/elsevier.html

Elsevier Science B.V.

Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Journal of Organometallic Chemistry Supplement (2003) 1–19
Journal of Organometallic Chemistry
www.elsevier.com/locate/jorganchem

Cumulative Author Index of Volumes 641–664

Abdelhalim Ahmed, I., **649** 147
Abele, B.C., **661** 149
Abram, U., **656** 1
Abrisqueta, M.D., **663** 40
Abu-Surrah, A.S., **648** 55
Adachi, A., **642** 137
Adam, W., **661** 3; **661** 17
Adams, H., **656** 270; **659** 142; **663** 145
Adams, R.D., **651** 124; **652** 51
Afonin, A.V., **659** 172
Agustin, D., **646** 138
Ahmed, M.O., **659** 196
Akagi, T., **645** 201
Akiba, K.-y., **644** 441
Akiyama, S., **646** 277; **652** 3
Akiyama, Y., **651** 137
Akkari-El Ahdab, A., **658** 94
Al-Allaf, T.A.K., **654** 21
Albano, V.G., **649** 64; **659** 15
Albanov, A.I., **659** 172
Alberdi, G., **659** 67; **663** 239
Albert, J., **663** 277
Albertin, G., **660** 55
Albus, S., **656** 288
Alcón, M.J., **655** 134
Aldinger, F., **659** 29
Aldridge, S., **649** 9
Alesso, G., **664** 77
Alfredo Toscano, R., **649** 86
Al-Hamad, A.J.H., **656** 274
Al-Jahdali, M., **648** 99
Al-Juaid, S.S., **649** 121
Ali, S., **646** 125; **657** 146
Alijah, A., **644** 223
Alley, S.R., **656** 120; **658** 181
Alonso-Moreno, C., **656** 129
Al-Rubaie, A.Z., **656** 274
Alt, H.G., **648** 134; **658** 259
Alvarez-Falcón, M.M., **663** 40
Alvarez-Larena, A., **654** 91
Alvarez Toledano, C., **645** 183; **648** 280; **649** 86
Amatore, C., **644** 416
Amberger, H.-D., **656** 18
Amoedo, A., **663** 239
Amour Morkan, İ., **651** 132
Amseis, P., **646** 262
Anantharaman, G., **646** 4
Anctil, E.J.-G., **653** 150
Andrieu, B., **644** 27
Andy Hor, T.S., **659** 92
Aneetha, H., **663** 151
Angeles Paz-Sandoval, M., **663** 127
Antiñolo, A., **655** 63; **656** 129
Anulewicz-Ostrowska, R., **651** 72
Anwander, R., **647** 236
Anzai, J.-i., **662** 9
Aoyagi, S., **653** 229
Aplin, R.T., **645** 176
Ara, I., **663** 284
Arakawa, R., **645** 94
Arcas, A., **663** 164
Archibald, S.J., **657** 71
Ardizzoia, G.A., **649** 173
Ares, R., **659** 67
Aresta, M., **662** 112
Arévalo, A., **664** 170
Argyropoulos, N., **654** 117
Arif, A.M., **641** 53; **641** 195; **655** 158
Arita, C., **658** 106
Arndt, S., **647** 158
Arnold, P.L., **647** 205
Aronica, L.A., **648** 109
Asadi, A., **645** 105
Asahara, M., **644** 479
Asami, A., **654** 56
Asao, T., **642** 80; **648** 164; **650** 279
Asbury, A.L., **642** 97
Ashoorzadeh, A., **654** 140
Aspinall, H.C., **647** 151
Asselberghs, I., **642** 259; **655** 70
Asthalter, T., **642** 203
Astruc, D., **644** 125
Atwood, D.A., **654** 36
Auroux, A., **657** 98
Avarvari, N., **644** 292; **644** 301
Ayazi, A., **656** 71

Baba, G., **644** 342
Babonneau, F., **657** 75
Báča, J., **649** 181; **657** 59
Bachrach, S.M., **644** 39
Back, S., **664** 123
Bäckvall, J.-E., **652** 105
Bacsa, J., **645** 206
Badshah, A., **656** 97
Bae, B.-J., **648** 214
Baggio, R., **660** 71
Baghurst, R.E., **649** 9
Bagnoli, F., **642** 280
Baier, F., **661** 111
Bailey, W.F., **646** 59
Bain, A.D., **656** 243
Bajpai, S., **649** 70; **649** 70; **658** 34; **658** 34
Baker, P.K., **648** 99; **658** 77; **664** 37; **664** 45
Baker, R.J., **656** 203
Bakhmutov, V.I., **657** 155; **660** 153
Bakhmutova, E.V., **657** 155
Bala, M.D., **647** 105
Balavoine, G.G.A., **644** 19
Balazs, G., **642** 113

Elsevier Science B.V.
doi:10.1016/S0022-328X(03)00334-6

Balázs, L., **648** 33
Baldwin, L.C., **646** 230
Baldwin, R., **644** 461
Baleta, A.S., **660** 173
Ballesteros, A., **644** 363
Ballot, S., **664** 208
Balueva, A., **644** 112
Bandoli, G., **650** 43
Banerjee, A., **645** 33
Banno, T., **653** 288
Bansal, R.K., **646** 113
Barbe, J.-M., **652** 69
Barberà, G., **642** 16; **657** 217; **663** 221
Barbier-Baudry, D., **647** 167
Bardají, M., **648** 1
Barluenga, J., **644** 363
Barón, G., **664** 170
Barrau, J., **658** 94
Barron, A.R., **644** 53
Barton, L., **657** 40
Bartsch, R., **644** 68
Basili, F., **650** 69
Bassindale, A.R., **655** 1
Bastero, A., **664** 77
Bastian, M., **654** 109
Basu Baul, T.S., **654** 100
Batail, P., **644** 301
Bats, J.W., **664** 94
Batsanov, A.S., **656** 211
Battioni, P., **644** 522
Bau, R., **654** 216
Bauer, C., **657** 205
Bäuerle, P., **653** 200
Baukov, Y.I., **655** 1
Bautista, D., **663** 164
Bays, J.T., **652** 95
Bazan, G.C., **642** 275
Beagley, P., **645** 206
Becker, E., **649** 55
Beckmann, J., **648** 188; **648** 204; **659** 73
Beckwith, R.E.J., **658** 21
Behrens, U., **649** 50
Bekir Peynircioglu, N., **656** 11
Belanzoni, P., **648** 14; **656** 156
Beletskaya, I.P., **657** 267
Bellassoued, M., **662** 172
Beller, M., **641** 30
Belli Dell'Amico, D., **651** 52
Beltrán, H.I., **657** 194
Belyakov, S., **659** 165
Belzner, J., **649** 25
Ben Ammar, H., **662** 63
Bencze, É., **642** 246
Benetollo, F., **642** 64
Benincori, T., **644** 424
Benisch, C., **641** 102
Benito, J.M., **664** 258
Benjamin Coapes, R., **649** 199
Bentrude, W.G., **646** 239
Bera, A.K., **645** 33
Berger, D.J., **646** 68
Berger, F., **659** 29
Bergsträßer, U., **644** 409
Bergt, M., **661** 199
Berke, H., **663** 192
Bernard, R., **657** 83
Bernard, S., **657** 91
Berndt, A., **646** 262
Bertagnolli, H., **649** 128
Bertani, R., **642** 32; **642** 64
Bertrand, G., **646** 2; **664** 70
Bertus, P., **664** 268
Beyer, C., **654** 187
Bezombes, J.-P., **644** 453
Bhaduri, S., **654** 132
Bhanthumnavin, W., **646** 239
Bhasin, K.K., **658** 71
Bhattacharya, S., **645** 33
Bhatti, M.H., **657** 146
Bian, Z.-G., **650** 181; **664** 201
Bianchini, G., **651** 5
Biasiolo, M., **642** 32
Bieg, T., **660** 133
Bielert, F., **649** 141
Bilgin-Eran, B., **655** 105
Binger, P., **656** 288
Bird, S.J., **647** 205
Birot, M., **646** 179
Bitterwolf, T.E., **652** 95
Blacque, O., **656** 139; **663** 192
Blair, S., **656** 43
Blais, P., **646** 107
Blankenbuehler, M.T., **642** 268
Bleuel, E., **648** 62
Blitz, J.P., **650** 133
Bochkarev, M.N., **647** 94
Bochmann, M., **654** 221; **663** 63
Bode, M., **644** 253
Bodes, G., **641** 90
Bogardi, R., **645** 65
Boháč, A., **659** 43
Böhler, C., **641** 227
Bohling, J.C., **641** 53
Böhme, U., **654** 187; **660** 43
Böhmer, I.K., **658** 259
Bohra, R., **645** 118; **651** 98; **664** 66
Bolm, C., **662** 23
Bolte, M., **649** 246; **664** 94
Bolze, F., **644** 89
Bonaterra, M., **664** 223
Bondarev, O.G., **655** 204
Bonnet, F., **647** 167
Bonnet, M.C., **659** 186
Bonnetot, B., **657** 83; **657** 98; **657** 107
Bordignon, E., **660** 55
Bordoni, S., **659** 15
Borisov, Y.A., **645** 87
Bornemann, H., **641** 156
Borrmann, H., **660** 27
Borrmann, T., **657** 205
Borrós, S., **657** 239
Bosque, R., **645** 146
Botella, L., **663** 46
Bott, S.G., **644** 53
Boubekeur, K., **644** 301
Boudjouk, P., **645** 1
Bouix, J., **657** 91
Bould, J., **657** 256
Bouquant, J., **664** 268
Bourgeois, D., **644** 247
Bouwman, E., **650** 1
Boxel, R.V., **655** 70
Bradley, D.D.C., **645** 168
Bradley, J.S., **657** 71

Bradley, S., **656** 49
Brady, J.C., **649** 252
Braga, D., **656** 188
Bragin, V.I., **657** 163
Brandl, M., **659** 22
Brar, A.S., **650** 223
Brauer, D.J., **645** 14
Braune, S., **641** 26
Bravo, J., **650** 157
Bregadze, V.I., **649** 1; **657** 155; **657** 163; **657** 171; **657** 267
Brendler, E., **662** 14
Brenna, S., **649** 173
Breunig, H.J., **642** 113; **648** 33; **648** 209; **660** 167; **664** 130
Breuning, M., **661** 31; **661** 49
Breuzard, J., **644** 98
Breuzard, J.A.J., **659** 186
Briehn, C.A., **653** 200
Bringmann, G., **661** 31; **661** 49
Brintzinger, H.-H., **660** 85; **663** 58; **663** 213
Brisdon, B.J., **664** 176
Britten, J.F., **656** 243
Brixner, T., **661** 199
Brosius, K.M., **652** 51
Brown, D.A., **658** 88
Brown, K.J., **658** 50
Bruce, M.I., **650** 141; **650** 188
Brugger, S., **641** 165
Brunet, J.-J., **644** 27
Brunner, H., **659** 22
Bryce, M.R., **656** 211
Bubnov, Y.N., **649** 232; **657** 123; **657** 146
Buchalski, P., **663** 249
Budzichowski, T.A., **658** 88
Bueno, A., **642** 212; **656** 304; **660** 62
Bühl, M., **648** 126
Buijs, W., **641** 70
Bukowska-Strzyżewska, M., **645** 268
Bunz, U.H.F., **652** 21
Buono, G., **644** 237
Burdet, F., **652** 69
Burke, J.M., **649** 199; **652** 77
Buron, C., **664** 70
Burrow, R.A., **664** 306
Burschka, C., **646** 200
Burzlaff, N., **641** 134; **651** 66
Busetto, L., **649** 64; **659** 15
Buston, J.E.H., **645** 176
Butcher, R., **654** 100
Butcher, R.J., **649** 70; **658** 34; **658** 169
Butler, I.S., **648** 93
Buttigieg, G.A., **650** 108

Caballero, A., **663** 118
Cabeza, J.A., **663** 227
Cadierno, V., **663** 32
Cai, R.-F., **655** 120
Cai, X., **644** 272; **651** 149; **651** 150
Calder, R.J., **649** 9
Calderazzo, F., **642** 280; **651** 52; **662** 137
Caliman, V., **650** 198
Callejas-Gaspar, B., **661** 181
Calò, V., **645** 152
Caminade, A.-M., **644** 112
Camm, K.D., **656** 49
Campo, J.A., **654** 150
Cámpora, J., **644** 331
Camurati, I., **664** 5
Cano, M., **654** 150
Canovese, L., **642** 58; **650** 43
Caporusso, A.M., **648** 109
Capparelli, M.V., **654** 91
Captain, B., **651** 124
Carballo, R., **656** 1
Carbayo, A., **658** 15
Carboni, B., **657** 136
Cardin, C.J., **662** 188
Carlos Araujo Da Silva, J., **646** 179
Carmona, E., **644** 331
Carpenetti, D.W., II, **642** 120
Carré, F., **654** 210
Carrillo, D., **660** 71
Carrión, M.C., **650** 210
Carroll, P.J., **663** 70
Caruso, F., **645** 134
Casagrande, G.A., **656** 177
Casanove, M.-J., **644** 307
Casas, J.S., **656** 1
Casey, C.P., **642** 120; **663** 91
Castarlenas, R., **663** 235
Castel, A., **651** 44
Castillo, I., **644** 431
Castro, A., **663** 145
Castro-Juiz, S., **655** 127
Catasús, M., **642** 212; **656** 304
Cativiela, C., **650** 157
Cattey, H., **659** 22
Caubet, A., **645** 146; **651** 105
Cauzzi, D., **663** 256
Cea-Olivares, R., **654** 51; **659** 95
Cecconi, F., **645** 101
Celentano, G., **644** 424
Cendrowski-Guillaume, S.M., **644** 209
Cerrada, E., **663** 289
Cha, S.-H., **645** 47
Chahma, M., **648** 81
Chai, J.-F., **642** 179
Chakraborty, S., **645** 33
Chan, A.S.C., **645** 59
Chandra, M., **648** 39; **658** 43
Chandrasekaran, A., **645** 158
Chang, C.-C., **648** 176
Chang, C.-W., **660** 127
Chang, Y.-C., **655** 49; **655** 172
Chatenet, D., **662** 83
Chaudret, B., **644** 307; **645** 288
Chauhan, A.K.S., **658** 169
Chauhan, M., **645** 1
Chauvin, R., **654** 180
Chavez, I., **651** 44
Chen, J., **645** 127; **658** 214
Chen, J.-Y., **648** 193; **658** 117
Chen, K., **645** 168
Chen, P.-P., **655** 49
Chen, S.-C., **655** 172
Chen, T., **646** 68
Chen, W., **650** 84; **654** 233; **658** 153
Chen, X., **655** 89
Chen, X.P., **645** 59
Chen, Y., **645** 82; **647** 114
Chen, Y.-C., **656** 199
Cheng, F., **657** 71
Cheng, H.-W., **656** 228
Cheng, J., **650** 84; **658** 153
Chernov, N.F., **642** 91

Chesnokova, T.A., **642** 20
Chessa, G., **650** 43
Cheung, S.-H., **655** 39
Chiang, M.Y., **648** 176; **659** 125
Chicote, M.T., **663** 40
Chien, J.C.W., **645** 158; **654** 29
Chien, S.W., **658** 159
Chipanina, N.N., **642** 91
Chisholm, M.H., **641** 15
Chistyakov, A.L., **657** 155
Chivers, T., **646** 107
Cho, C.S., **649** 258; **650** 65
Choi, J.-C., **659** 133
Choi, K.-H., **659** 107
Chojecki, A., **664** 136
Chojnowski, J., **642** 163; **660** 14
Choo, T.N., **645** 235
Choukroun, R., **649** 15
Chuit, C., **644** 453
Chuluunbaatar, T., **644** 32
Chung, Y.K., **660** 161
Churchill, D.G., **642** 9
Cifuentes, M.P., **642** 259
Cinellu, M.A., **664** 77
Cingolani, A., **645** 134; **651** 5
Ciruelos, S., **663** 183
Clancy, G., **649** 100
Classen, J., **641** 3
Claver, C., **662** 188; **664** 77
Clegg, W., **650** 231; **656** 43; **657** 256
Clément, J.-C., **664** 214
Clentsmith, G.K.B., **662** 192
Coapes, R.B., **652** 77
Coles, M.P., **662** 178
Coles, S.J., **662** 98
Comba, P., **641** 70
Comoy, C., **662** 83
Compain, C., **650** 57
Conole, G., **642** 228
Constantieux, T., **644** 237
Coquerel, Y., **659** 176
Corma, A., **655** 134
Corneli, D., **641** 70
Cornu, D., **657** 83; **657** 91; **657** 98
Corradi, M.M., **656** 49
Corrette, C.P., **647** 225
Corriu, R.J.P., **653** 20
Corriu, R.R.J., **644** 453
Costa, M., **656** 57
Costello, J.F., **662** 98
Coulombeau, A., **644** 381
Coutouli-Argyropoulou, E., **654** 117
Coutrot, P., **662** 83
Coville, N.J., **642** 195
Cowley, A.H., **644** 487
Cramer, R.E., **654** 44
Cremer, S.E., **646** 153
Crespo, M., **642** 171
Cretiu, G., **659** 95
Cristau, H.-J., **644** 381
Cristau, H.J., **646** 94
Cristina Cassani, M., **647** 71
Crochet, P., **663** 32
Císařová, I., **642** 148; **649** 181; **657** 59; **658** 235; **663** 134
Cuenca, T., **645** 112; **663** 1; **663** 173
Cuevas, J.V., **658** 15
Cui, D., **650** 84; **658** 153
Cunha-Silva, L., **656** 281
Cypryk, M., **642** 163; **660** 14

Dąbkowski, W., **644** 490
Dahan, F., **649** 113
Dai, X., **645** 212; **645** 262
Dajka, B., **644** 32
Dakternieks, D., **648** 188; **648** 204; **659** 73
Dallemer, F., **644** 19
Dana, B.H., **648** 251
Daniel, K.L., **655** 192
Danner, S., **644** 409
Daran, J.-C., **644** 19
d'Arbeloff-Wilson, S.E., **655** 7
Darini, K., **642** 32
Darkwa, J., **656** 262; **660** 108
Davankov, V.A., **655** 204
Davies, A.J., **656** 203
Davies, D.L., **662** 43
Davis, T.J., **663** 70
Díaz, A., **650** 210
De Cian, A., **644** 376
Deacon, G.B., **647** 50
Deborde, V., **644** 494
Deeney, T., **642** 40
Deforth, T., **646** 171
Dehnert, U., **649** 25
de Jesús, E., **664** 258
de Koning, C.B., **642** 195
de la Cruz, R., **663** 108
Delaere, D., **644** 194
Delgado, E., **649** 21
del Hierro, I., **655** 63
Dell'Amico, D.B., **642** 280
Delouvrié, B., **644** 130
Delpech, F., **651** 44
del Río, D., **655** 16
del Río, I., **663** 227
de Meijere, A., **653** 129
Demina, M.M., **659** 172
Demonceau, A., **663** 235
Denis, J.-M., **644** 342
Denk, K., **649** 219
Denmark, S.E., **653** 98
Denton, M.B., **650** 108
de Oliveira, G.M., **656** 177
Deprèle, S., **644** 154
Deprés, J.-P., **659** 176
Derat, E., **664** 268
Derdau, V., **642** 131
des Abbayes, H., **664** 214
De Silva, R.M., **642** 237; **664** 27
Desmurs, J.-R., **646** 171
De Vos, D., **659** 159
Dhanalakshmi, K., **645** 27
Díez-Barra, E., **660** 50
Di Fabio, A., **650** 69
Di Stilo, A., **650** 77
Diallo, O., **644** 27
Dietl, C., **661** 199
Ding, K., **645** 59
Dixneuf, P.H., **662** 63; **663** 235
Djedovic, N., **648** 8
Do, Y., **655** 186
Dodero, V.I., **650** 173
Doherty, S., **650** 231
Dolgushin, F.M., **654** 123

Domenichini, B., **647** 167
Domrachev, G.A., **642** 20; **664** 106
Dong, T.-Y., **659** 125
Dong, Y., **654** 170
Donnadieu, B., **644** 27; **649** 15; **649** 21
Don Tilley, T., **644** 431
Doppiu, A., **663** 183
Dörfler, U., **657** 205
Döring, S., **644** 61
Dormond, A., **647** 167
Dötz, K.H., **641** 185
Douziech, B., **649** 15
Dozol, J.-F., **657** 83
Drago, D., **644** 214
Drake, J.E., **642** 71; **642** 113; **645** 118; **651** 98; **664** 66
Drent, E., **650** 1
Drew, M.G.B., **658** 77; **664** 37; **664** 45
Driess, M., **644** 468
Drouin, M., **644** 89
Drozdov, A., **651** 5
Du, C., **655** 89
Duboc, R., **644** 512
Dumond, Y.R., **653** 252
Dunina, V.V., **654** 66
Duriez, C., **657** 107
Duthie, A., **648** 204
Dutta, S., **654** 100
Duzs-Moore, A.M., **658** 88
Dybowski, P., **644** 501

Eaborn, C., **649** 121
Ebener, M., **656** 27
Ebetino, F.H., **646** 212
Edelmann, F.T., **647** 94; **647** 245
Edelstein, N.M., **656** 18
Edwards, P.G., **642** 281
Ehlers, A.W., **644** 369
Eichele, K., **660** 78
Eisenstein, O., **647** 190
Eisenträger, F., **641** 220
El-Hamruni, S.M., **649** 121
El-khateeb, M., **664** 228
El Mail, R., **648** 149
El-Qisairi, A.K., **656** 168; **659** 50
Elarraoui, A., **642** 107
Elschenbroich, C., **641** 208
Elsegood, M.R.J., **650** 231; **664** 85; **664** 298
Enders, M., **641** 81
Endo, Y., **657** 48
Endres, A., **644** 174
Engel, V., **661** 191
Engelbrecht, P., **645** 65
Englert, U., **642** 280; **662** 150; **663** 183
Englich, U., **646** 271
Ephritikhine, M., **644** 209
Epstein, L.M., **657** 155
Erdmann, M., **661** 191
Eriksson, L., **657** 267
Erker, G., **641** 148; **644** 61; **651** 157; **663** 192
Ernst, R., **658** 259
Ernst, R.D., **641** 195; **655** 158
Ershova, V.A., **658** 147
Escudié, J., **644** 202; **659** 95
Espinet, P., **663** 108
Espinosa, E., **644** 89
Espinosa-Pérez, G., **645** 54
Esther Sánchez-Castro, M., **663** 127
Evans, C., **645** 281
Evans, W.J., **647** 1; **647** 2; **649** 252; **652** 61
Expósito, T., **655** 63

Facchin, G., **662** 70
Fagan, M.A., **663** 91
Falaschi, S., **662** 137
Falvello, L.R., **663** 284
Fan, H.-T., **656** 228
Fanzhi, K., **664** 1
Faoro, E., **656** 177
Faraldo, F., **656** 270
Farfán, N., **657** 194
Farran, J., **654** 91
Fawcett, J., **660** 91; **662** 43
Fedotova, Y.V., **642** 20
Fei, Z., **661** 111
Fejfarová, K., **642** 148; **656** 81; **663** 134
Fekete, Á., **644** 278
Fensterbank, L., **644** 130
Fernandes, R.M., Jr., **656** 177
Fernandez, E.J., **663** 289
Fernández, A., **654** 162; **655** 127; **656** 270; **663** 239
Fernández, J.J., **654** 162; **655** 127; **656** 270; **659** 67
Fernández, P., **641** 81
Ferrence, G.M., **647** 84
Fetterly, B., **646** 161
Field, L.D., **655** 146
Filin, A.M., **657** 155
Fink, M.J., **646** 230
Fischer, A., **647** 94; **647** 245
Fischer, A.K., **648** 1; **648** 306
Fischer, H., **641** 134; **651** 66
Flores, J.C., **664** 258
Flores, M.A., **657** 232
Fokken, S., **663** 158
Fontani, M., **648** 306
Font-Bardía, M., **642** 171; **651** 105
Font-Bardia, M., **642** 107; **645** 146; **650** 258; **663** 277
Forniés, J., **663** 284
Forniés-Cámer, J., **662** 188
Forsyth, C.M., **647** 50
Fortuniak, W., **660** 14
Fourmigué, M., **644** 292
Fox, A.M., **645** 168
Framery, E., **657** 107
Francis, M.D., **646** 191
Franke, F., **644** 468
Franken, A., **657** 176; **657** 180
Franz, J., **652** 95
Freedman, D.A., **642** 97
Freytag, M., **644** 68
Friedrichsen, W., **649** 161
Friend, J., **645** 218
Frison, G., **644** 105; **644** 285
Fröhlich, R., **641** 148; **644** 61; **663** 192
Fruttero, R., **650** 77
Fu, W., **651** 124
Fuentealba, M., **660** 71
Fugami, K., **653** 50
Fujihara, T., **654** 56
Fujimoto, C.H., **649** 252
Fujita, K.-i., **649** 289
Fujiwara, Y., **646** 196
Fukin, G.K., **642** 20; **649** 100
Fukuda, T., **644** 508
Furilla, J.L., **655** 192

Furin, G.G., **654** 123
Furtado, S.J., **656** 49
Furukawa, S., **649** 289
Fusek, J., **649** 181

Gabbaï, F.P., **644** 164
Gabel, D., **657** 205
Gade, L.H., **661** 85
Gailer, J., **650** 108
Gajardo, F., **660** 71
Galindo, A., **655** 16; **662** 59; **663** 83
Gallagher, J.F., **655** 70
Gallego, A.M., **663** 108
Gallou, F., **656** 81
Gallucci, J.C., **654** 224
Gamasa, M.P., **651** 22
Gamer, M.T., **647** 123
Gan, J., **645** 168
Gangoda, M., **658** 141
Ganis, P., **642** 64
Gantzel, P., **651** 90
Gao, G., **663** 13
García, J.J., **664** 170
García, M.M., **659** 56
García, S., **649** 21
García-Álvarez, J., **663** 32
García-Garrido, S.E., **663** 32
García-Granda, S., **663** 227
García-Herbosa, G., **658** 15
García-Martínez, E., **656** 1
García-Montalvo, V., **654** 51
García-Zarracino, R., **664** 188
Garcia, M.H., **655** 70
Garcia-Monteagudo, J.C., **656** 1
Garland, M.T., **660** 71
Garralda, M.A., **648** 149
Garratt, S.A., **662** 43
Gasco, A., **650** 77
Gaspar, P.P., **646** 68
Gauvin, R.M., **658** 1
Gavrilov, K.N., **655** 204
Gaw, K.G., **664** 294
Gebert, S., **641** 142
Gehrhus, B., **644** 272; **651** 149; **651** 150
Geiseler, G., **646** 262
Gelbrich, T., **659** 1
Geldbach, T.J., **644** 214
Genêt, J.-P., **644** 512
Genevois-Borella, A., **644** 381
Gentil, S., **656** 81
George, G.N., **650** 108
Gerber, G., **661** 199
Geri, R., **648** 109
Gervais, C., **657** 75
Gervasio, G., **656** 57
Ghaffari, A., **646** 262
Ghesner, I., **642** 113; **648** 33; **664** 130
Ghesner, M.E., **660** 167
Ghilardi, C.A., **645** 101
Ghosez, L., **646** 171
Ghosh, S., **645** 33; **645** 33
Giannoccaro, P., **645** 152
Giarikos, D.G., **649** 252
Gil-Rubio, J., **661** 181
Gimeno, J., **651** 22; **663** 32; **663** 204
Ginsberg, A., **641** 195
Girreser, U., **642** 1
Gladfelter, W.L., **649** 268
Gladysz, J.A., **641** 53
Glass, R.S., **650** 108
Gleiter, R., **641** 3; **641** 102; **658** 242
Gliński, M., **664** 136
Gloriozov, I., **656** 27
Godoy, F., **662** 130
Goeta, A.E., **649** 199
Goeva, L.V., **657** 163
Goh, L.Y., **664** 161
Goldfuss, B., **641** 67
Goldman-Lev, V., **650** 151
Goll, S.K., **657** 273
Golovin, A.V., **658** 147
Gómez, E., **648** 280
Gómez, I., **663** 21
Gómez, M., **659** 186
Gómez, R., **664** 258
Gomez-Cordón, J., **663** 284
Gómez-Ortiz, L.A., **654** 51
Gómez-Sal, P., **664** 258
Gonçalves, I.S., **648** 270; **649** 108; **656** 281
González, A., **663** 277
González-Maupoey, M., **645** 112
Goodyear, J.W., **664** 176
Gorden, J.D., **644** 487
Gordillo-Román, B., **663** 127
Gorelsky, S.I., **659** 202
Gori, M., **648** 109
Görlitzer, H.W., **647** 236
Görls, H., **648** 87
Gornitzka, H., **644** 202; **651** 44; **658** 94; **661** 111; **664** 70
Goumans, T.P.M., **644** 369
Gouygou, M., **644** 19
Graiff, C., **663** 204; **663** 256
Graña, M., **663** 239
Grandini, C., **664** 5
Granell, J., **663** 277
Grasa, G.A., **653** 69; **658** 126
Grasser, S., **641** 121
Gray, G., **642** 40
Greatrex, R., **657** 256; **657** 279
Greb, M., **661** 67
Grebe, B., **642** 1
Green, J.C., **649** 100
Greene, A.E., **659** 176
Greeves, N., **647** 151
Grepioni, F., **656** 188
Grigoleit, S., **644** 223
Grigor'ev, S.V., **658** 228
Grimmer, N.E., **642** 195
Grintselev-Knyazev, G.V., **657** 115
Grison, C., **662** 83
Groarke, M., **649** 108
Grobelny, Z., **660** 6; **660** 133
Gros, C.P., **644** 89
Groux, L.F., **660** 98
Grugier, J., **662** 172
Grundy, J., **662** 178
Grüner, B., **649** 181; **657** 59; **657** 83
Grützmacher, H., **641** 227; **644** 285
Grzelka, A., **660** 14
Gstöttmayr, C.W.K., **649** 141
Guan, H.-X., **664** 201
Gudat, D., **644** 181
Guerchais, V., **644** 498
Guérin, C., **654** 210

Guerra, J., **660** 50
Guerrero, A., **650** 210
Guerrero, G., **649** 113
Guerret, O., **664** 70
Gugger, P.A., **644** 136
Guilard, R., **644** 89; **652** 69
Guio, L.V.Y., **659** 142
Gulon, T., **656** 116
Gun'ko, Y.K., **647** 71
Günther, H., **656** 27
Guo, J.-P., **655** 89
Gupta, A., **645** 118
Gusarova, N.K., **659** 172
Gustafsson, B., **649** 204
Gutiérrez-Puebla, E., **662** 59
Guzei, I., **649** 276
Guzei, I.A., **660** 108
Gyepes, R., **642** 148; **658** 235; **663** 134

Haas, A., **646** 80
Haeuseler, A., **661** 169
Hagyard, M., **664** 288
Haile, T., **646** 68
Håkansson, M., **649** 204
Hall, C.D., **648** 8
Hall, I.H., **650** 123
Hall, J.J., **647** 205
Hämäläinen, M., **659** 64
Hambley, T.W., **655** 146
Hameed, A., **656** 102
Hamon, J.-R., **660** 71
Hampel, F., **641** 53
Han, C., **648** 119
Han, L., **650** 59; **658** 62
Hanson, M.J., **654** 3
Häp, S., **644** 181
Happer, A., **659** 10
Harada, A., **651** 114; **654** 74; **664** 234
Harada, N., **648** 164
Hardman, N.J., **644** 461
Harms, K., **641** 208
Harouch, Y.E., **644** 202
Harrington, L.E., **656** 243
Harrington, R.W., **664** 176
Härter, P., **649** 141
Hartung, J., **661** 67
Harvey, P.D., **644** 89
Hascall, T., **652** 37
Hauck, B.J., **645** 1
Haukka, M., **654** 8; **655** 31
Hay, C., **644** 494
Hayakawa, Y., **653** 288
Hayashi, T., **653** 41
He, C., **650** 59
He, L., **655** 233
He, M., **651** 146
He, R., **645** 127
Heath, G.A., **644** 136
Heckel, F., **661** 17
Heinemann, F.W., **641** 90; **644** 357
Heinicke, J., **646** 113
Helm, M.L., **650** 198; **659** 84
Helmchen, G., **641** 67
Hemingway, C.W., **664** 176
Henderson, K.W., **656** 63
Henderson, R.A., **645** 290
Henderson, W., **650** 123; **656** 120; **656** 262; **658** 181; **659** 92
Heng, L., **655** 182
Henner, B.J.L., **654** 210
Henry, P.M., **656** 168
Heras, J.V., **654** 150
Herber, R.H., **642** 203; **658** 210
Herberhold, M., **641** 173; **656** 71
Herdtweck, E., **660** 121; **663** 173
Herker, M., **658** 266
Hermann, U., **646** 271
Hernández, R., **648** 149
Hernández, Z., **648** 280
Hernandez, S., **659** 95
Hernández-Martínez, J., **663** 127
Hernández-Ortega, S., **654** 51
Hernández Ortega, S., **659** 56
Heron, N., **658** 21
Herrmann, W.A., **642** 246; **649** 108; **649** 141; **649** 219; **660** 121
Hervé, A.-C., **664** 214
Herzog, M.N., **654** 29
Herzog, U., **648** 220; **660** 27; **660** 36; **660** 43; **662** 14
Hesford, M., **649** 214
Heuer, B., **655** 55
Heydt, H., **644** 409
Hidai, M., **658** 106
Hill, J., **645** 168
Hill, M.S., **664** 182
Hill, N.J., **642** 186
Hillier, A.C., **653** 69; **664** 298
Hind, A., **656** 63
Hingst, M., **645** 14
Hino, S., **644** 461
Hissler, M., **644** 494
Hitchcock, P.B., **644** 272; **645** 105; **646** 191; **647** 71; **647** 198; **649** 121; **650** 198; **651** 149; **651** 150; **655** 7; **659** 84; **662** 178; **662** 192; **662** 193; **663** 263; **664** 182; **664** 245
Hiyama, T., **653** 58; **653** 114
Ho, D.M., **658** 88
Ho, N.N., **654** 216
Hodson, A.G.W., **664** 277
Hoehn, F., **641** 165
Hoffmann, D., **662** 1
Hofmann, M., **644** 357; **646** 262; **657** 273
Hofmann, P., **641** 220
Hong, F.-E., **655** 49; **655** 172
Hongmei, L., **664** 1
Höpfl, H., **654** 36; **664** 188
Hor, T.S.A., **650** 123; **658** 159
Horáček, M., **642** 148; **656** 81; **658** 235; **663** 134
Hörner, W., **649** 128
Horváth, B., **659** 43
Hörz, M., **659** 29
Hosmane, N.S., **646** 21
Hossain, M.M., **654** 202
Hosseini, A., **654** 140
Hosseini, M.W., **644** 376
Hou, Z., **647** 61
Hourihane, R., **642** 40
Howard, J.A.K., **649** 199; **652** 77; **654** 66
Hsu, J.-H., **646** 167
Hu, B., **650** 181
Hu, N., **650** 84; **655** 167
Hu, Q.-M., **648** 119; **656** 228; **662** 51
Hu, X.E., **646** 212
Hu, Y., **650** 59; **658** 62
Huang, B., **650** 84; **658** 153
Huang, B.-R., **659** 125
Huang, J., **645** 59; **647** 100; **647** 105; **650** 114

Huang, J.-Y., **648** 176
Huang, M., **659** 121
Huang, Q., **645** 59
Huang, S.D., **658** 141
Huang, S.-L., **658** 191
Huang, X., **655** 39
Huang, Y.-L., **655** 49
Huang, Y.-Z., **658** 9
Huang, Z., **655** 233
Huang, Z.-E., **655** 120
Huang, Z.-X., **655** 120
Huch, V., **646** 138
Hudson, R.D.A., **655** 70
Hughes, A.K., **657** 9
Hughes, D.L., **663** 63
Hughes, D.W., **656** 243
Hugh MacBride, J.A., **657** 256
Hugo Klahn, A., **662** 130
Huikai, S., **655** 182
Hulkes, A.G., **647** 71
Humbel, S., **664** 268
Humphrey, M.G., **642** 259; **650** 133
Humphreys, A.S., **655** 227
Hunger, M., **641** 9
Hupfield, P.C., **660** 14
Hurst, S.K., **642** 259; **660** 1
Hursthouse, M.B., **645** 118; **649** 9; **651** 98; **659** 1; **662** 98; **664** 66
Hüttenhofer, M., **660** 85; **663** 58
Huttner, G., **664** 123
Hutton, A.T., **645** 206
Hydrio, J., **644** 19

Ibarlucea, L., **648** 149
Iglesias, M., **655** 134
Ignatovich, L., **659** 165
Ignatyev, I.S., **656** 258
Iijima, T., **654** 229; **658** 281
Ikeda, H., **642** 156; **648** 226
Ikonnikov, N.S., **655** 204
Ilg, K., **661** 137
Imrie, C., **645** 65
Indolese, A.F., **641** 30
Innorta, G., **650** 69
Ionescu, E., **644** 253
Irrgang, T., **647** 12
Isea, R., **651** 22
Ishikawa, M., **645** 47
Ishiyama, T., **648** 231
Itami, K., **653** 105
Ito, S., **642** 80; **648** 164; **650** 279
Ito, Y., **644** 508
Ivanova, N.I., **659** 172
Iwata, M., **645** 201
Iwuoha, E.I., **656** 262
Iyoda, M., **658** 210
Izod, K., **656** 43

Jacob, K., **648** 306
Jacobs, P., **659** 159
Jagner, S., **649** 204
Jahr, H.C., **641** 185
Jain, V.K., **645** 118; **651** 98; **655** 218; **664** 66
Jalón, F.A., **650** 210; **663** 118
Janak, K.E., **652** 37
Jank, S., **656** 18
Jansat, S., **659** 186
Jaouen, G., **644** 350
Javier de la Mata, F., **664** 258
Jean, S.-W., **650** 268
Jeffery, J.C., **650** 210
Jehle, H., **648** 155
Jendras, M., **646** 134
Jensen, A.E., **653** 122
Jensen, C.M., **654** 44
Jeong, J.H., **649** 258
Jérôme, F., **652** 69
Jia, W.-L., **649** 152; **658** 198
Jiang, J.-K., **650** 274
Jiang, P., **646** 68
Jie, S., **647** 114
Jiménez Tenorio, M., **663** 151
Jin, G.-X., **655** 167
Jin, K., **645** 127
Jin, X., **658** 62
Jin, Z., **653** 167; **654** 83
Jones, C., **645** 256; **650** 198; **656** 203
Jones, P.G., **644** 68; **644** 253; **648** 1
Jones, W.D., **658** 132
Joudat, M., **651** 44
Juárez-Saavedra, P., **663** 127
Juillard, A., **644** 522
Jullien, V., **644** 376
Jung, K.A., **645** 201
Jutand, A., **644** 416
Jutzi, P., **654** 176; **662** 34

Kaddachi, M.T., **662** 63
Kadish, K.M., **652** 69
Kadkin, O., **649** 161
Kagechika, H., **657** 48
Kähler, T., **649** 50
Kai, H., **642** 137
Kaifer, E., **641** 9; **641** 113
Kaim, W., **655** 218
Kairies, D., **655** 96
Kakusawa, N., **656** 234
Kalam-Alami, M., **644** 125
Kalck, P., **644** 12
Kalinin, V.N., **655** 204
Kaloun, E.B., **644** 350
Kaltenpoth, G., **641** 195
Kamei, T., **653** 105
Kamikawa, K., **661** 31
Kamyshova, A.A., **645** 87
Karaçar, A., **644** 68
Karakaş, D., **660** 116
Karl, C., **641** 134
Kaschke, M., **641** 81
Kashiwagi, Y., **662** 9
Kastner, G., **649** 147
Kataeva, N.A., **654** 66
Katayama, H., **645** 192
Katoh, K., **659** 102
Kaufmann, D.E., **657** 136
Kautz, J.A., **651** 34
Kauzlarich, S.M., **644** 461
Kawachi, A., **644** 479
Kawamura, K., **646** 204
Kawano, Y., **659** 102
Kawashima, T., **644** 504
Kaya, C., **658** 176; **660** 116
Kazmaier, U., **641** 26
Kaźmierczak, L., **644** 490
Kee, T.P., **644** 516

Kégl, T., **644** 32
Keglevich, G., **644** 32
Kehr, G., **646** 125; **663** 192
Keim, W., **662** 150
Keizer, T.S., **654** 36
Keller, L.P., **645** 1
Kemmitt, R.D.W., **660** 91
Kempe, R., **647** 12
Kennedy, A.R., **648** 288; **656** 63
Kennedy, J.D., **657** 20; **657** 176; **657** 180; **657** 205; **657** 256; **657** 262; **657** 279
Keresztes, I., **642** 97
Ketkov, S.Y., **649** 100; **664** 106
Keuseman, K.J., **654** 66
Khoo, S.B., **664** 161
Khvostov, A.V., **647** 71; **647** 198; **663** 263
Kibayashi, C., **653** 229
Kiefer, B., **661** 199
Kiefer, W., **648** 155; **661** 181
Kikuchi, C., **662** 9
Kikuchi, S., **642** 80; **650** 279
Killat, S., **662** 150
Kilner, C.A., **657** 176; **657** 180; **657** 205; **657** 256; **657** 262
Kim, B.T., **650** 65
Kim, M.Y., **654** 170
Kim, T.-J., **649** 258; **650** 65
Kim, T.K., **650** 65
Kim, Y., **655** 186
Kim, Y.H., **660** 161
Kimari, D.M., **658** 88
King, J.D., **642** 228
King, R.B., **646** 146
Kinnunen, T.-J.J., **654** 8; **655** 31
Kiran, B., **644** 265
Kirchner, K., **649** 55
Kirillov, E.N., **647** 94
Kissounko, D.A., **651** 34
Kissounko, N.S., **651** 34
Kitamura, M., **647** 158
Kitamura, T., **646** 196
Kivekäs, R., **645** 39; **654** 237; **657** 187; **657** 224
Kivekas, R., **657** 232
Kivekäs, R., **657** 247
Klapötke, T.M., **654** 170
Klimova, E.I., **645** 183; **649** 86; **659** 56
Klimova, T., **645** 183; **649** 86; **659** 56
Klimpel, M.G., **647** 236
Klingebiel, U., **646** 134
Kloth, M., **656** 203
Klüpfel, B., **661** 95
Kłys, A., **642** 143; **645** 268
Knight, J.G., **650** 231
Knochel, P., **653** 122
Knödler, A., **655** 218
Knopf, C., **662** 14
Ko, B.-T., **658** 117
Kobayashi, M., **645** 192
Kobayashi, Y., **653** 91
Köcher, S., **641** 62
Kochi, J.K., **653** 11
Kochina, T.A., **656** 258
Kodama, G., **659** 102
Koenig, M., **644** 324
Kohl, G., **641** 81
Köhler, F.H., **658** 266
Koike, T., **653** 105
Kojima, S., **644** 441
Koll, L.C., **650** 173
Kollár, L., **644** 32
Konchenko, S.N., **658** 204
Kornev, A.N., **642** 20
Körnich, J., **656** 89
Korostylev, A.V., **655** 204
Korpi, H., **659** 64
Koser, G.F., **658** 141
Kosuge, M., **654** 56
Kosugi, M., **653** 50
Kotora, M., **663** 13
Kottsieper, K.W., **645** 14
Koutsantonis, G.A., **655** 227
Kozanoglu, F., **658** 274
Kraatz, H.-B., **648** 81
Kraft, B.M., **658** 132
Krahn, M., **646** 107
Kralik, J., **649** 191; **664** 123; **664** 150
Kranenburg, M., **651** 80
Krannich, L.K., **649** 78
Kreindlin, A.Z., **645** 87
Krempner, C., **662** 1
Kress, J., **658** 1
Krompiec, S., **660** 133
Krüger, C., **656** 288
Krüger, T., **648** 209
Kruppa, A.I., **658** 228
Kuan, F.S., **659** 73
Kubiak, C.P., **651** 90
Kubicki, M.M., **656** 139
Kubišta, J., **642** 148; **656** 81; **658** 235; **663** 134
Kucera, W.R., **646** 223
Kudinov, A.R., **649** 136; **657** 115; **657** 171
Kühn, F.E., **642** 246; **649** 108; **656** 281
Kulkarni, S.A., **654** 132
Kulsomphob, V., **655** 158
Kumada, M., **653** 62
Kumakura, S., **654** 56
Kumar, A., **658** 169
Kunai, A., **642** 137
Kunicki, A.R., **664** 136
Kurashima, F., **662** 9
Kurasina, M., **648** 72
Kurita, J., **656** 234
Kurita, M., **642** 80; **650** 279
Kursky, Y.A., **642** 20
Kutyreva, V.V., **664** 106
Kuz'mina, L.G., **654** 66
Kwak, Y.-W., **645** 47
Kwaśniewska, S., **651** 72
Kwok, W.-H., **645** 235
Kwon, O.-S., **652** 51

Laali, K.K., **658** 141
Labella, L., **651** 52
Lacour, J., **644** 392
Laguna, A., **648** 1; **663** 289
Laguna, M., **663** 289
Lagunas, M.C., **648** 62
Lake, C.H., **649** 78
Lakshman, M.K., **653** 234
Lalinde, E., **663** 284
Lammertsma, K., **644** 369
LaMonica, G., **649** 173
Lancaster, S.J., **654** 221
Landis, M.S., **646** 239
Lane, P.A., **645** 168

Lang, E.S., **656** 177; **664** 306
Lang, H., **641** 41; **641** 62; **649** 191; **662** 14; **664** 123; **664** 142; **664** 150
Lange, H., **660** 36; **660** 43
Lantero, D.R., **656** 217
Laïos, I., **644** 350
Lapinte, C., **656** 146
Laporte, C., **641** 227
Lappalainen, K., **648** 55
Lappert, M.F., **644** 272; **647** 1; **647** 71; **647** 198; **651** 149; **651** 150; **663** 263
Lara-Sanchez, A., **663** 63
Laschat, S., **642** 131
Laskoski, M., **652** 21
Lass, R., **661** 137
Lastra, E., **663** 204
Lath, R., **649** 70; **658** 34
Layfield, R.A., **650** 75
Lazzarato, L., **650** 77
Lebedev, R.V., **655** 204
Lebel, H., **658** 126
Leblanc, J.-C., **656** 139
Le Bozec, H., **644** 498
Leclercq, G., **644** 350
Leduc, P., **644** 522
Lee, B.Y., **642** 275; **660** 161
Lee, G.-H., **646** 167; **648** 176; **648** 193; **650** 37; **650** 268; **658** 117; **658** 191; **659** 125; **660** 127
Lee, H.M., **653** 69
Lee, H.N., **654** 170
Lee, H.-Y., **649** 258
Lee, J.S., **648** 81
Lee, K.-K., **645** 47
Lee, S.-C., **659** 133
Le Floch, P., **644** 1
Le Gendre, P., **644** 231
Le Guyader, F., **644** 98
Le Nôtre, J., **662** 63
Lehmen, K., **661** 149
Lehmus, P., **648** 55
Lei, D., **646** 68
Leigh, G.J., **664** 245
Leiner, E., **646** 247
Lemaire, M., **644** 98; **659** 186
Leng, X., **645** 287
Leng, X.-B., **642** 179
Lenoble, G., **644** 12
Lensen, N., **662** 172
Lentz, D., **641** 215
Leong, W.K., **664** 161
Lerner, H.-W., **649** 246; **664** 94
Leshina, T.V., **658** 228
Leskelä, M., **648** 55; **659** 64
Lesvier, M., **644** 342
Leung, P.-H., **644** 4
Levason, W., **642** 186; **649** 214
Levendis, D.C., **645** 65
Lever, A.B.P., **659** 202
Li, G.Y., **653** 63
Li, H., **654** 83
Li, K., **660** 108
Li, Q.-S., **664** 201
Li, X.-Y., **658** 9
Li, Z., **650** 59
Liang, C., **647** 105
Liao, F.-L., **648** 193; **658** 117
Licht, A.I., **648** 134
Liek, C., **645** 14
Lienafa, J., **644** 27
Light, M.E., **645** 118; **649** 9; **651** 98; **664** 66
Limberg, C., **641** 9
Lin, C., **655** 233
Lin, C.-C., **648** 176; **658** 117
Lin, K., **660** 139
Lin, Y.-C., **660** 127
Lin, Z., **655** 39; **662** 120
Lindner, E., **641** 165; **660** 78
Linehan, J.C., **650** 249; **652** 95
Linker, T., **661** 159
Linnolahti, M., **648** 49
Lipkowski, J., **663** 249
Liu, D.-S., **655** 89
Liu, J.-T., **662** 51
Liu, P.-C., **648** 119
Liu, S.-T., **656** 199
Liu, X., **644** 4; **646** 212; **654** 83
Llanos, J.M., **663** 98
Llop, J., **657** 232
Lobanova, I.A., **657** 171
Loginov, D.A., **649** 136
Lokshin, B.V., **642** 246
Lolli, M.L., **650** 77
Londesborough, M.G.S., **657** 256; **657** 262
Londez, A., **644** 392
Long, N.J., **649** 94
Lönnecke, P., **644** 81
Lopes, N., **655** 70
López, C., **645** 146; **650** 258; **651** 105; **664** 170
López, J.A., **644** 331
López-Solera, I., **656** 129
López-Torres, M., **654** 162; **655** 127; **656** 270; **663** 239
Lorber, C., **649** 15
Lorenz, V., **647** 245
Lork, E., **648** 33; **648** 209; **660** 167; **664** 130
Lo Sterzo, C., **653** 177
Loubser, C., **645** 65
Lough, A.J., **655** 70
Lovchik, M.A., **656** 299
Love, J.A., **642** 283
Low, P.M.N., **658** 159
Lu, G.-L., **659** 107
Lu, T.-H., **650** 202
Lucas, D., **655** 63
Lucas, N.T., **650** 133
Lucchini, V., **642** 58
Lucht, B.L., **653** 167
Ludányi, K., **644** 32
Ludwig, G., **641** 81
Luh, T.-Y., **646** 167; **653** 209
Luhtanen, T.N.P., **648** 49
Lukešová, L., **663** 134
Lukevics, E., **659** 165
Luo, B., **649** 268
Luo, Y., **662** 144
Luther-Davies, B., **642** 259
Lydon, D.P., **645** 246
Lyssenko, K., **641** 208; **656** 27
Lyssenko, K.A., **657** 115
Lyubimov, S.E., **655** 204

Ma, H., **650** 114
Ma, K., **652** 11; **664** 94
Maas, G., **644** 174
Macdonald, C.L.B., **644** 487
Mace, W.J., **664** 288

Mach, K., **642** 148; **656** 81; **658** 235; **663** 134
Maciągiewicz, I., **644** 501
Macias, R., **657** 40
Mack, A., **644** 409
Madrigal, C., **663** 204
Maercker, A., **642** 1; **660** 6; **660** 133
Maestro, M.A., **642** 212; **656** 304
Magali Cadena, J., **663** 277
Mägerlein, W., **641** 30
Maguire, J.A., **646** 21
Magull, J., **644** 47
Mahía, J., **642** 212; **656** 304
Main, L., **664** 288
Maisonnat, A., **644** 307
Maitlis, P.M., **663** 145
Maity, S., **650** 202
Majoral, J.-P., **644** 112
Mak, T.C.W., **658** 159
Malacria, M., **644** 130
Maldanis, R.J., **645** 158
Malisch, W., **648** 155; **661** 3; **661** 95
Malyugina, S., **641** 208; **656** 27
Manassero, M., **664** 77
Mancilla, T., **657** 194
Mandal, S.K., **658** 88
Mandolesi, S.D., **650** 173
Mann, B.E., **663** 145
Manning, A.R., **651** 60; **655** 70
Manriquez, J.M., **651** 44
Mansei, Y., **646** 196
Mansuy, D., **644** 522
Manuel, G., **644** 324
Manzano, B.R., **650** 210; **663** 118
Manzoni de Oliveira, G., **664** 306
Manzur, C., **660** 71
Mapolie, S.F., **660** 108
Marabello, D., **656** 57
Marazzi, M., **663** 256
Marçalo, J., **647** 216
Marchetti, F., **642** 280; **645** 134; **649** 64; **651** 5; **651** 52; **662** 137
Marconi, G., **641** 90
Marder, T.B., **649** 199; **652** 77
Mariño, M., **659** 67
Maron, L., **647** 190
Martin, D., **644** 292
Martin, K.L., **658** 126
Martinez, V., **644** 125
Martinez Garcia, M., **645** 183
Martinez Mendoza, J.M., **645** 183
Martins, J., **646** 171
Martín, S.E., **664** 223
Martín-Alvarez, J.M., **663** 108
Martín-Barrios, S., **661** 149
Martínez García, M., **649** 86
Martínez-Ilarduya, J.M., **663** 108
Martínez-Méndez, L., **663** 227
Martín-Vaca, B.M., **651** 22
Maruyama, G., **654** 56; **655** 23
Marx, T., **664** 116
Masalles, C., **657** 239
Mascellani, N., **664** 5
Masciocchi, N., **649** 173
Masdeu-Bultó, A.M., **662** 188
Mashima, K., **663** 5
Maspero, A., **649** 173
Massa, W., **646** 262
Master, S.Y., **645** 218
Mata, J.A., **660** 71
Matar, M., **664** 110
Mathey, F., **646** 1; **646** 15; **650** 57
Mathur, P., **659** 196
Matsubara, K., **650** 96; **660** 145
Matsubayashi, G.-e., **645** 94
Matsui, K., **653** 141
Matsukawa, S., **644** 441
Matsumoto, K., **654** 233
Matthews, M.L., **655** 55
Mauschick, F.T., **648** 126
Maya, C., **644** 331
Mayer, H.A., **641** 165
Mayer, M.F., **654** 202
Mayer, P., **656** 177
Mayr, A., **648** 93
Mays, M.J., **642** 228; **642** 237; **664** 27
Mazet, C., **658** 1
Mazur, A., **646** 212
McCleland, C.W., **645** 65
McDonagh, A.M., **642** 259
McGlinchey, M.J., **656** 243
McGowan, P.C., **656** 49
McIndoe, J.S., **648** 237
McKeown, A.E., **656** 63
McPartlin, M., **642** 228; **664** 277
Mealy, M.J., **646** 59
Mecking, S., **662** 150
Medvedeva, A.S., **659** 172
Meehan, M.M., **648** 99
Meichel, E., **649** 191; **664** 150
Meier, R.J., **651** 80
Meijers, R.H.A.M., **651** 80
Melis, K., **659** 159
Mendez Iturbide, D., **645** 183
Mendia, A., **663** 289
Mentes, A., **660** 91
Mereiter, K., **649** 55
Merigo, A., **642** 280
Merino, R.I., **663** 284
Merino, S., **644** 112; **660** 50
Merkel, R., **641** 142
Merzweiler, K., **648** 306; **650** 25
Mesbah, W., **646** 262
Meshcheryakov, V.I., **657** 171
Messerle, B.A., **655** 146
Meunier, P., **656** 81
Meyer, F., **641** 113
Michalski, J., **644** 490
Michelin, R.A., **642** 32; **662** 70
Midollini, S., **645** 101
Miele, P., **657** 83; **657** 91; **657** 98; **657** 107
Migchielsen, S., **654** 1
Migchielsen, S., Publishing Editor, Inorganic Chemistry, **651** 1
Mignani, G., **646** 171
Mikami, K., **662** 77
Miki, K., **645** 228
Milius, W., **641** 173; **649** 232; **656** 71; **656** 97
Millán, L., **660** 71
Mima, S., **650** 96
Minami, T., **645** 192
Minas da Piedade, M.E., **662** 105
Minghetti, G., **664** 77
Mingos, D.M.P., **641** 126; **652** 87
Mink, J., **642** 246
Mirskov, R.G., **658** 228
Mitchenko, O., **659** 165

Mitsudo, K., **653** 105
Mityuk, D., **656** 27
Mitzel, N.W., **644** 313
Miura, M., **648** 297; **653** 161
Miyaura, N., **642** 145; **653** 54
Miyazawa, M., **653** 269
Miyoshi, K., **646** 204; **648** 231
Mizobe, Y., **658** 106
Mizojiri, R., **653** 91
Mo, C.-Y., **642** 228
Mobin, S.M., **658** 43
Moigno, D., **648** 155; **661** 181
Moiseev, S.K., **655** 204
Molander, G.A., **647** 225
Möller, F., **655** 96
Moloney, M.G., **645** 176
Monari, M., **649** 64
Monge, Á., **662** 59
Monoi, T., **642** 156; **648** 226
Monopoli, A., **645** 152
Montchamp, J.-L., **644** 154; **653** 252
Montilla, F., **662** 59
Moore, D.S., **658** 77; **664** 37; **664** 45
Moore, G., **659** 203
Moore, Z., **658** 126
Moracho, A., **648** 1
Morales, D., **654** 109
Morales-Morales, D., **654** 16; **654** 44
Moreira, G., **644** 324
Morejko-Buż, B., **660** 6
Moreno, R.M., **660** 62
Morita, N., **642** 80; **648** 164; **650** 279
Morris, M.J., **659** 142
Morrison, C.A., **650** 75
Morton, J.G.M., **652** 21
Moïse, C., **644** 231; **656** 139
Moss, G.P., **642** 284
Moss, J.R., **645** 206
Mosteiro, R., **654** 162
Moulines, F., **644** 125
Mountford, P., **647** 145
Moutet, J.-C., **656** 116
Moutloali, R.M., **656** 262
Moyano, A., **642** 212; **656** 304; **660** 62
Mozzon, M., **642** 32; **662** 70
Mstislavsky, V., **656** 27
Muehlhofer, M., **641** 121; **660** 121
Mugnier, Y., **655** 63; **659** 22
Mukhopadhyay, S., **654** 132
Mukkanti, A., **649** 209
Müller, A., **659** 29
Müller, K., **659** 29
Müller, P., **649** 25; **656** 288
Muller, G., **659** 186
Mulvey, R.E., **648** 288; **656** 63
Mumtaz, R., **656** 49
Muñoz-Hernández, M.A., **664** 170
Murahashi, S.-I., **653** 27
Murphy, V.J., **652** 37
Murso, A., **661** 111
Mushtina, T.G., **642** 20
Mutin, P.H., **649** 113

Nacci, A., **645** 152
Nagahama, N., **652** 31
Naganuma, K., **644** 504
Nagashima, H., **650** 96; **660** 145
Nájera, C., **663** 46
Nájera, F., **644** 130
Naka, A., **645** 47
Naka, H., **653** 269
Nakamoto, M., **644** 441
Nakamura, A., **654** 74; **663** 5; **664** 234
Nakamura, E., **652** 31
Nakano, M., **645** 94
Nakayama, J., **654** 56
Nakayama, Y., **642** 156; **648** 226; **651** 114; **654** 74; **664** 234
Nakazawa, H., **646** 204; **648** 231
Nataro, C., **656** 181
Näther, C., **649** 161
Natrajan, L.S., **647** 205
Navarro, R., **650** 157
Nayral, C., **644** 307
Neander, S., **649** 50; **656** 89
Neculai, A.M., **644** 47
Neculai, D., **644** 47
Neels, A., **658** 251
Negishi, E.-i., **653** 34
Negrebetsky, V.V., **655** 1
Neilson, R.H., **646** 223
Nekrasov, Y.S., **645** 87
Nelson, J.H., **644** 136
Németh, C., **642** 246
Neo, Y.C., **658** 159
Neretin, I.S., **642** 236
Neufeld, S., **661** 111
Neumann, B., **644** 81; **662** 34
Neumann, C., **644** 253
Neumann, S., **641** 90
Nevondo, F.A., **656** 262
Newman, P.D., **642** 281
Ng, S.M., **662** 120
N.G., J., **659** 10
Ngono, C.J., **644** 237
Nguyen, M.T., **644** 194; **644** 265
Nguyen, P., **652** 77
Nicholson, B.K., **645** 281; **648** 237; **664** 288
Nickel, S., **647** 50
Nickel, T., **645** 14
Nie, W., **645** 82; **647** 114
Nief, F., **642** 208; **647** 139
Nieger, M., **641** 185; **644** 181; **661** 95
Niehues, M., **663** 192
Nierlich, M., **644** 209
Nishino, F., **645** 228
Nixon, J.F., **646** 191; **650** 198; **655** 7; **656** 188; **656** 305; **659** 84; **662** 192; **662** 193
Nobile, C.F., **662** 150
Noels, A.F., **663** 235
Nogai, S., **644** 313
Noiret, N., **664** 208
Nokami, T., **653** 105
Nolan, S.P., **644** 247; **653** 69; **658** 126
Noltemeyer, M., **644** 47; **646** 134
Nomura, M., **648** 297; **653** 161
Noss, H., **647** 12
Nöth, H., **644** 189; **649** 43
Novopashin, P.S., **659** 172
Nowik, I., **642** 203; **658** 210
Nuber, B., **641** 102
Núñez, R., **657** 224; **657** 247
Nüske, H., **653** 129
Nyamori, V.O., **645** 65
Nyulászi, L., **644** 278; **655** 7; **659** 84

Oba, G., **644** 324
Ob'edkov, A.M., **664** 106
Obora, Y., **660** 173
Obrey, S.J., **644** 53
Oda, T., **650** 96
O'Dowd, C., **657** 20
Oelckers, B., **662** 130
Oeser, T., **641** 3; **641** 102
Ogawa, T., **646** 204
Ogino, H., **645** 201; **650** 91; **659** 102
Oguma, K., **648** 297
Ogura, K., **653** 269
Ohba, S., **662** 77
Ohe, K., **645** 228
Ohmiya, H., **653** 141
Ohmura, H., **662** 77
Ohshita, J., **642** 137
Okada, H., **645** 201
Okajima, S., **656** 234
Okamoto, M., **664** 59
Okazaki, M., **645** 201
Okita, K., **642** 137
Okoshi, M., **648** 72
Okuda, J., **647** 158; **663** 158
Olbrich, F., **649** 50; **656** 89
Oliva, J.M., **657** 232
Ong, T.K.W., **644** 4
Opris, L., **642** 113
Oprunenko, Y., **641** 208; **656** 27
Orchard, S.D., **649** 214
Orita, A., **648** 246
Orive, I., **655** 63
Orlandini, A., **645** 101
Ormsby, D.L., **657** 256; **657** 279
Ortigueira, J.M., **663** 239
Osada, A., **656** 234
Otera, J., **648** 246
Otero, A., **655** 63; **656** 129
Ou, Z., **652** 69
Ovseenko, S.T., **642** 236
Ozawa, F., **645** 192
Özkar, S., **658** 274

Paavola, S., **645** 39; **654** 237; **657** 187
Pace, G., **642** 64
Pachamuthu, K., **648** 307
Pae, D.H., **646** 68
Pakkanen, T.A., **648** 49; **654** 8; **655** 31
Pal, A.K., **645** 33
Palacio, M., **644** 522
Palazzi, A., **659** 15
Palma, P., **644** 331
Palmer, A.J., **651** 60
Pampaloni, G., **662** 137
Pan, W., **653** 98
Pancrazi, A., **644** 247
Pandey, D.S., **642** 48; **648** 27; **648** 39; **658** 43
Pandolfo, L., **642** 64
Panneerselvam, K., **650** 202
Pantenburg, I., **664** 116
Pápai, I., **663** 83
Paquet, V., **658** 126
Paquette, L.A., **656** 81
Park, D.-K., **649** 258
Park, J.T., **648** 214
Parkin, G., **642** 9; **652** 37
Parkin, S., **654** 36
Parlagh, G., **644** 32
Parr, J., **664** 85
Pastukhov, F.V., **657** 123
Pasynkiewicz, S., **663** 249
Pattenden, G., **653** 261
Paul, R.L., **650** 210
Pavel, I., **648** 155
Pedall, A., **649** 225; **649** 232
Pellet-Rostaing, S., **644** 98
Peng, S.-M., **659** 125
Perdigon-Melon, J.A., **657** 98
Pereira, M.T., **655** 127; **659** 67
Pereira, T., **663** 239
Pereiras-Gabián, G., **656** 1
Perekalin, D.S., **657** 115
Pérez, S., **642** 171; **650** 258; **651** 105
Periasamy, M., **649** 209
Perruchas, S., **644** 301
Persoons, A., **642** 259; **655** 70
Pesonen, E., **655** 31
Peters, T.B., **641** 53
Peterson, D.L., **654** 66
Pétraud, M., **646** 179
Petrov, E.S., **647** 21
Petrovskii, P.V., **645** 87; **649** 136; **654** 123; **655** 204; **657** 115; **657** 171
Petrusová, L., **658** 235
Pettinari, C., **645** 134; **651** 5
Pettinari, R., **645** 134
Peulecke, N., **646** 113
Pfeifer, R.-M., **661** 31; **661** 49
Pfeiffer, J., **646** 53
Pfeiffer, M., **661** 111
Philouze, C., **659** 176
Pickering, I.J., **650** 108
Picquet, M., **644** 231
Pietrzykowski, A., **663** 249
Pietzsch, C., **654** 187
Piironen, U., **648** 55
Pillinger, M., **656** 281
Pillot, J.-P., **646** 179
Pinhas, A.R., **656** 299
Piniella, J.F., **654** 91
Pinilla, E., **654** 150
Piotrowski, H., **644** 189
Pirat, J.-L., **644** 381
Pires de Matos, A., **647** 216
Pirio, N., **656** 81
Planeix, J.-M., **644** 376
Plecnik, C., **654** 216
Plešek, J., **649** 181; **657** 59
Podestá, J.C., **650** 173
Podubrin, S., **656** 288
Pogrebnyak, V.M., **658** 147
Po-Kwan Lau, J., **659** 151
Polamo, M., **659** 64
Poli, R., **652** 95; **654** 109; **663** 269
Polosukhin, A.I., **655** 204
Polozov, A.M., **646** 153
Polyakov, N.E., **658** 228
Pool, B., **659** 10
Postigo, A., **656** 108
Powell, D.H., **649** 78
Power, P.P., **644** 461
Präsang, C., **646** 262
Prashar, S., **655** 63; **656** 129
Prass, I., **646** 271
Predieri, G., **663** 256

Preece, I., **645** 218
Pregosin, P.S., **644** 214
Pritzkow, H., **641** 70; **641** 81; **641** 102; **641** 142; **641** 195; **644** 468; **655** 96; **664** 150
Protasiewicz, J.D., **646** 255
Protchenko, A.V., **647** 71; **647** 198
Prunet, J., **644** 247
Puerta, M.C., **648** 27; **648** 39; **663** 151
Pumpenmeier, L., **644** 81
Puranik, V.G., **659** 196
Pushkarevsky, N.A., **658** 204

Qaseer, H.A., **656** 168; **659** 50
Qian, C., **645** 82; **647** 114
Qian, M., **645** 127
Qian, Y., **645** 59; **647** 100; **647** 105; **650** 114
Qingmin, W., **645** 286; **655** 182
Quaranta, E., **662** 112
Quiclet-Sire, B., **644** 404

Raabe, G., **662** 23
Radaelli, S., **644** 424
Radius, U., **655** 96
Rahier, N., **646** 94
Rahn, M.D., **645** 168
Rais, D., **641** 126; **652** 87
Rais, J., **657** 59
Raithby, P.R., **642** 237
Rakhlin, V.I., **658** 228
Ram, C., **649** 70; **658** 34
Ramello, S., **642** 280
Rameshkumar, C., **649** 209
Ramón, D.J., **663** 21
Ramos-Quiñones, J., **664** 188
Ramírez, L.R., **659** 56
Ramírez de Arellano, M.C., **648** 62; **663** 164
Ranaivonjatovo, H., **644** 202
Rao, M.L.N., **659** 117
Rasul, T., **655** 115
Rataboul, F., **644** 307
Rath, N.P., **657** 40
Ratnani, R., **651** 98
Rausch, B.J., **641** 3; **658** 242
Rausch, M.D., **645** 158; **654** 29
Re, N., **656** 156
Réau, R., **644** 494; **663** 118
Reddmann, H., **656** 18
Reddy, K.R., **656** 199
Redón, R., **654** 16
Reger, D.L., **658** 50
Regitz, M., **644** 409
Reichel, E., **642** 203
Reichwald, F., **663** 158
Reid, G., **642** 186; **649** 214; **655** 55
Reinke, H., **662** 1
Ren, T., **655** 239; **660** 1
Renard, S.L., **644** 516
Repo, T., **648** 55
Resconi, L., **664** 5
Reuter, H., **649** 147
Reutskaya, A.M., **659** 172
Reyé, C., **644** 453
Reyes-Lezama, M., **645** 54
Reynes, O., **656** 116
Rheingold, A.L., **655** 158
Rheinwald, G., **648** 220; **649** 191; **660** 27; **660** 43; **662** 14; **664** 123; **664** 150
Ribeiro-Claro, P., **648** 270
Ricard, L., **642** 208; **647** 139; **650** 57
Ricci, A., **653** 177
Richard, P., **644** 231; **654** 109; **663** 269
Richards, A.F., **645** 256
Richter, I., **646** 200
Rickard, C.E.F., **644** 168; **645** 235; **654** 140
Riera, V., **663** 227
Rima, G., **658** 94
Rinaldi, M., **664** 5
Ripley, M., **655** 55
Rivarola, E., **654** 100
Rivière, P., **651** 44
Río, D., **663** 83
Robins, E.G., **649** 199
Robinson, B.H., **648** 251
Roblou, E., **644** 27
Rocha, J., **656** 281
Röder, J.C., **641** 113
Rodríguez, A., **650** 210
Rodríguez, A.M., **656** 129
Rodríguez, G., **645** 112
Rodríguez-Curiel, R.I., **660** 50
Rodriguez, A., **663** 63
Roesky, H.W., **644** 47; **646** 4
Roesky, P.W., **647** 123
Roewer, G., **654** 187; **662** 14
Rohde, B., **649** 25
Roitershtein, D.M., **647** 21
Romanenko, V., **664** 70
Román Torres-Lubián, J., **663** 127
Romão, C.C., **648** 270; **663** 78
Romero, J.A.C., **647** 225
Rominger, F., **641** 3; **641** 102; **641** 220; **658** 242
Ronig, B., **664** 116
Roper, W.R., **644** 168; **645** 235
Ros, J., **642** 107
Rosair, G.M., **657** 217; **663** 221
Rosales-Hoz, M.J., **649** 43; **660** 153
Roschmann, K.J., **661** 3
Rosenblum, M., **659** 43
Rosi, M., **648** 14
Rösler, R., **642** 71
Rossi, M., **645** 134
Rossi, R.A., **656** 108; **664** 223
Rourke, J.P., **645** 246
Rourke, K.M., **656** 181
Rouzaud, J., **651** 44
Rowlings, R.B., **648** 288
Roy, R., **650** 202
Royal, G., **656** 116
Royo, B., **648** 270; **663** 78
Royo, E., **663** 213
Rozhenko, A.B., **644** 223
Rüba, E., **649** 55
Ruben Toscano, A., **645** 183
Rubner, O., **661** 191
Rüdenauer, I., **661** 111
Rudolf, B., **648** 293
Rudolph, R., **641** 81
Rüffer, T., **655** 111
Ruhlandt-Senge, K., **646** 271
Ruiz Ramirez, L., **645** 183
Runqiu, H., **645** 286; **655** 182
Russell, D.R., **660** 91; **662** 43
Ruthe, F., **644** 253
Rutsch, P., **641** 9

Ruíz Ramírez, L., **649** 86
Rybakova, L.F., **647** 21
Rybarczyk-Pirek, A., **656** 102
Rybinskaya, M.I., **645** 87
Ryowa, T., **645** 94
Ryu, E.-S., **649** 258

Sabatino, P., **659** 15
Sada, M., **644** 424
Sadorge, A., **656** 139
Sagawa, T., **645** 192
Saha-Möller, C.R., **661** 3; **661** 17
Sahay, A.N., **648** 39; **658** 43
Saint-Aman, E., **656** 116
Saitoh, A., **642** 145
Sakakura, T., **659** 133
Sakamaki, K., **642** 137
Sakarya, N., **662** 192; **662** 193
Saldamli, S., **658** 274
Salem, M., **662** 63
Salesch, T., **641** 165
Sališová, M., **659** 43
Saluzzo, C., **644** 98
Salzer, A., **663** 183
Samoc, M., **642** 259
Sanchez, F., **644** 381
Sánchez, A., **656** 1
Sánchez, F., **655** 134
Sánchez, M., **654** 36
Sánchez-Cabrera, G., **649** 43; **660** 153
Sander, W., **641** 156
Sannicolò, F., **644** 424
Santamaría, J., **644** 363
Santes, V., **648** 280
Santillan, R., **657** 194
Santo, C., **642** 58; **650** 43
Sappa, E., **656** 57
Sato, M., **648** 72; **654** 56; **655** 23
Satoh, K., **645** 201
Satoh, T., **648** 297; **653** 161
Sauthier, M., **644** 494; **663** 118
Sauvageot, P., **656** 139
Savignac, M., **644** 512
Sawamura, M., **652** 31
Saxena, A., **650** 223
Sbrana, E., **651** 52
Scallorn, W.B., **652** 95
Scanlan, T.H., **650** 231
Schaper, F., **660** 85
Schär, D., **649** 25
Schatte, G., **646** 107
Schebaum, L.O., **654** 176
Scheer, M., **646** 247; **658** 204
Scheibitz, M., **652** 11
Schenk, W.A., **661** 3; **661** 31; **661** 129
Scherer, W., **647** 236
Scheschkewitz, D., **646** 262
Schiedel, M.-S., **653** 200
Schiemann, U., **644** 253
Schiemenz, B., **644** 461
Schier, A., **644** 313
Schildbach, D., **661** 149
Schlenker, M., **644** 253
Schleu, J., **641** 134
Schmalz, T., **641** 173
Schmid, R., **649** 55
Schmidbaur, H., **644** 313
Schmidt, H., **655** 111
Schmidt, H.-G., **644** 47
Schmidt, S., **655** 96
Schmittel, M., **661** 169
Schmutzler, R., **644** 68
Schneiderbauer, S., **644** 189
Schnöckel, H., **646** 191
Schoeller, W.W., **644** 223
Schollmeier, T., **646** 271
Scholz, J., **648** 87
Scholz, S., **652** 11; **664** 94
Schönberg, H., **641** 227
Schorm, A., **655** 96
Schormann, M., **663** 63
Schottenberger, H., **642** 203
Schreier, P., **661** 17
Schröder, D.L., **662** 150
Schubert, G., **663** 83
Schubert, U., **646** 53
Schulte, M., **644** 164
Schultz, A.J., **654** 216
Schultze, D., **649** 147
Schulze, H., **664** 116
Schumacher, D., **661** 95
Schwaiger, M., **658** 266
Schwenzer, B., **641** 134
Seeboth, N., **649** 141
Seibert, M., **650** 25
Seidel, N., **648** 306
Seino, H., **658** 106
Seki, H., **656** 234
Selegue, J.P., **642** 268
Sella, A., **664** 298
Selucký, P., **657** 59
Selvaratnam, S., **644** 4
Sémeril, D., **663** 235
Seok, W.K., **654** 170
Sevin, A., **644** 105
Sgamellotti, A., **648** 14; **656** 156
Shah, S., **646** 255
Shankar, R., **650** 223
Shao, J., **652** 69
Sharma, P., **648** 280
Sharma, R.K., **645** 118; **651** 98; **664** 66
Sharma, V., **651** 98; **664** 66
Sheen, W.-J., **650** 202
Sheldrick, W.S., **645** 14
Shen, Q., **647** 180; **662** 144
Shen, Z., **661** 191
Sherstyannikova, L.V., **642** 91
Shi, M., **650** 274
Shi, Z., **645** 127
Shim, C.B., **660** 161
Shim, S.C., **649** 258; **650** 65
Shimada, S., **659** 117
Shimoi, M., **659** 102
Shin, D.M., **660** 161
Shin, J.H., **642** 9
Shiozawa, R., **645** 201; **650** 91
Shirakawa, E., **653** 114
Shiu, K.-B., **648** 193; **650** 37; **650** 268; **658** 117
Shore, S.G., **654** 216
Shubina, E.S., **657** 155
Shul'ga, T., **659** 165
Shur, V.B., **654** 123
Shvo, Y., **650** 151
Shyryaev, A.A., **655** 204

Siebert, W., **641** 1; **641** 195
Sierra, L., **661** 149
Silaghi-Dumitrescu, I., **659** 95
Silaghi-Dumitrescu, L., **659** 95
Sillanpää, R., **657** 224; **657** 232; **657** 247
Silveira, E.T., **664** 306
Silvestru, A., **642** 71; **642** 113
Silvestru, C., **642** 71; **642** 113
Simon, F., **644** 301
Simón-Manso, E., **651** 90
Simons, R.S., **654** 224
Simpkins, N.S., **658** 21
Simpson, J., **648** 251
Sinclair, D.J., **653** 261
Singh, A., **642** 48
Singh, J., **658** 71
Singh, N., **642** 48
Singh, S., **646** 113
Sinha, C., **650** 202
Sirsch, P., **649** 141; **649** 219
Sitzmann, H., **654** 109
Sivaev, I.B., **649** 1; **657** 155; **657** 163; **657** 267
Sjöberg, S., **649** 1; **657** 163; **657** 267
Skelton, B.W., **650** 141; **650** 188; **655** 227
Skinner, M.E.G., **647** 145
Skowrońska, A., **644** 501
Slater, J.W., **645** 246
Slootweg, J.C., **644** 272; **651** 149; **651** 150
Slovokhotov, Y.L., **642** 236
Slugovc, C., **649** 55
Smith, B.E., **649** 293
Smith, F.E., **654** 100
Smith, J.D., **649** 121
Smith, M.B., **664** 85; **664** 294
Smith, M.D., **651** 124; **652** 21; **658** 50
Smith, P.D., **659** 1
Smith, R.C., **646** 255
Smith, S., **662** 98
Smoliakova, I.P., **654** 66
Snieckus, V., **653** 150
Sobota, P., **645** 292
Sokolov, V.I., **642** 236
Solan, G.A., **642** 228; **642** 237; **664** 27
Solans, X., **642** 107; **642** 171; **645** 146; **650** 258; **651** 105; **663** 277
Solčániová, E., **659** 43
Soler, L.P., **655** 146
Son, D.Y., **655** 115
Song, D., **648** 302
Song, L.-C., **648** 119; **656** 228; **662** 51
Song, M., **660** 139
Songkram, C., **657** 48
Sonogashira, K., **653** 46
Sordo, J., **656** 1
Souda, S., **653** 269
Souma, Y., **658** 214
Sözerli Can, S.E., **649** 121
Spalding, T., **642** 40
Spaniol, T.P., **647** 158; **663** 158
Spannenberg, A., **646** 113
Spencer, D.M., **645** 218
Spiegler, M., **647** 236
Spiniello, M., **654** 3
Srinivasu, C., **659** 196
Srivastava, M., **658** 34
Srivastava, P.C., **649** 70; **658** 34
Srivastava, R.C., **658** 169
Staeb, T.H., **641** 102
Stahl, J., **641** 53
Stalke, D., **661** 111
Stammler, A., **662** 34
Stammler, H.G., **644** 81
Stammler, H.-G., **662** 34
Standfest-Hauser, C., **649** 55
Stankevich, I.V., **657** 155
Starikova, Z.A., **649** 1; **649** 136; **657** 115; **657** 163; **657** 171
Starr, E.J., **645** 206
Štíbr, B., **657** 3; **657** 279
Stœckli-Evans, H., **658** 251
Steed, J.W., **664** 294
Stein, T., **641** 41; **649** 191; **664** 123; **664** 142; **664** 150
Steinborn, D., **655** 111
Steiner, A., **661** 111
Steiner, J., **646** 191
Stelzer, O., **645** 14
Stelzig, L., **664** 70
Stender, M., **644** 461
Štěpnička, P., **642** 148; **656** 81; **658** 235; **663** 134
Stevens, E.D., **658** 126
Stey, T., **661** 111
Stivalet, J.M.M., **659** 56
Stoccoro, S., **664** 77
Stoffelbach, F., **663** 269
Stöhr, F., **646** 53
Stolarzewicz, A., **660** 6; **660** 133
Stone, F.G.A., **651** 34
Strand, S.J., **644** 369
Strassner, T., **641** 121; **660** 121
Streubel, R., **644** 223; **644** 253
Ströbele, M., **660** 78
Strohmann, C., **661** 149
Stüer, W., **641** 203
Stulgies, B., **653** 129
Stumpf, R., **651** 66
Sturmayr, D., **646** 53
Styron, E.K., **649** 78
Su, M.-D., **659** 121
Suárez, A., **654** 162; **655** 127; **656** 270
Sudhakar, S., **646** 167
Sudheendra Rao, M.N., **646** 4
Sugihara, Y., **650** 280
Suginome, M., **644** 508
Suh, I.-H., **648** 214
Sumida, T., **642** 137
Sun, H., **655** 233
Sun, J., **645** 82; **647** 105; **650** 181; **658** 214; **662** 144; **664** 201
Sun, W.-H., **650** 59; **658** 62
Sundararajan, G., **645** 27
Sundermeyer, J., **655** 96
Suo, Q.L., **645** 287
Surana, A., **646** 113
Suranna, G.P., **662** 150
Süss-Fink, G., **658** 251
Sutcliffe, O.B., **656** 211
Suter, M., **644** 189
Suzuki, A., **653** 83
Suzuki, M., **648** 72
Swager, T.M., **653** 215
Szieberth, D., **659** 84
Szymoniak, J., **664** 268

Tabernero, V., **663** 173
Tacke, R., **646** 200
Tafipolsky, M., **647** 236
Taillefer, M., **646** 94

Takahashi, T., **647** 158; **663** 13
Takaishi, K., **657** 48
Takashima, Y., **651** 114; **654** 74; **664** 234
Takats, J., **647** 84
Takeuchi, R., **651** 137
Tamao, K., **644** 479; **646** 277; **652** 3; **653** 1; **653** 23; **653** 223
Tamura, H., **645** 94
Tanaka, M., **659** 117
Tanatani, A., **657** 48
Tanemura, A., **655** 23
Tang, J., **651** 146
Tang, L.-F., **642** 179; **649** 152; **658** 198
Tang, T., **650** 84; **658** 153
Taniguchi, K., **645** 192
Taraban, M.B., **658** 228
Tarassoli, A., **645** 105
Tasler, S., **661** 49
Tassan, A., **662** 70
Tatai, A., **642** 1
Tavares, Z.M., **648** 270
Taylor, K.J., **645** 218
Taylor, N.J., **652** 77
Taylor, P.G., **655** 1
Taylor, R., **656** 43
Taylor, R.G., **660** 14
Tea, C.G., **644** 342
Teat, S.J., **657** 256
Teixeira-Dias, J.J.C., **656** 281
Teixidor, F., **642** 16; **645** 39; **654** 237; **657** 187; **657** 217; **657** 224; **657** 232; **657** 239; **657** 247; **663** 221
Tejeda, J., **660** 50
Teo, M.E., **664** 161
Teplitskaya, L.N., **657** 155
Tepper, M., **645** 14
Terasawa, J.-i., **660** 145
Tessier, C.A., **654** 224
Theil, M., **662** 34
Thépot, J.-Y., **656** 146; **656** 243
Therrien, B., **658** 251
Thind, R.K., **664** 277
Thomas, C.M., **658** 251
Thompson, S., **646** 53
Thönnessen, H., **644** 68
Thormeier, S., **657** 136
Thornton-Pett, M., **656** 49; **657** 20; **657** 176; **657** 180; **657** 205; **657** 256; **657** 262
Thuilliez, A., **644** 416
Tian, H., **645** 168
Tian, X., **646** 212
Tiekink, E.R.T., **648** 188; **648** 204; **659** 73
Tikhonova, I.A., **654** 123
Timofeev, S.V., **657** 171
Tiripicchio, A., **663** 204; **663** 256
To, A., **645** 218
Tobita, H., **645** 201; **650** 91
Toganoh, M., **652** 31
Togrou, M., **664** 245
Tok, O.L., **649** 232; **657** 146; **657** 171
Tőke, L., **644** 32
Tokunaga, M., **660** 173
Tolom, N., **645** 65
Tomás, M., **644** 363
Tomaszewski, R., **655** 158
Tonel, F., **660** 55
Top, S., **644** 350
Torabi, A.A., **655** 227
Torralba, M.C., **654** 150
Torrens, H., **654** 16
Torres, M.L., **659** 67
Torres, M.R., **654** 150
Torres-Castellanos, L., **654** 91
Torroni, S., **650** 69
Toscano, A., **659** 95
Toscano, R.A., **648** 280
Toshimitsu, A., **644** 479
Tosik, A., **645** 268
Toupet, L., **644** 494; **644** 498; **663** 118; **664** 214
Touré, S.A., **644** 342
Toury, B., **657** 71; **657** 98; **657** 107
Toutois, P., **657** 107
Tovar, J.D., **653** 215
Tran Huy, N.H., **650** 57
Traverso, O., **664** 5
Trifonov, A., **647** 158
Trifonov, A.A., **647** 94
Trofimov, B.A., **659** 172
Trofimova, O.M., **642** 91
Troitskaya, L.L., **642** 236
Troyanov, S., **651** 5
Tsai, Y.-T., **655** 172
Tsuji, Y., **660** 173
Tugashov, K.I., **654** 123
Tunge, J.A., **663** 91
Turchaninov, V.K., **642** 91
Turner, M.L., **663** 145
Turner, P., **655** 146
Turro, N.J., **646** 239
Tutusaus, O., **657** 247
Twamley, B., **644** 461
Tworowska, I., **644** 490
Tyrrell, B.R., **647** 145

Ueda, M., **642** 145
Uemura, M., **661** 31
Uemura, S., **645** 228
Uenishi, J., **653** 141
Ueno, K., **645** 201
Uerpmann, C., **654** 210
Uguagliati, P., **650** 43
Uhl, W., **664** 110
Uhlig, F., **646** 271
Ulrich, K., **644** 498
Umbarkar, S.B., **659** 196
Umeno, M., **653** 288
Unoura, K., **654** 56
Urawa, Y., **653** 269
Uriel, S., **644** 301
Urriolabeitia, E.P., **650** 157
Urrutigoïty, M., **644** 12
Usón, I., **649** 25; **663** 284
Usón, M.A., **663** 98
Uzman, S., **655** 105

Vagedes, D., **641** 148; **651** 157
Vaillard, S.E., **656** 108
Valderrama, M., **651** 90
Valerga, P., **644** 331; **648** 27; **648** 39; **663** 151
Vallet, M., **644** 98
van der Drift, R.C., **650** 1
van der Pol, A., **651** 80
van Heel, J.P.C., **651** 80
Vankar, Y.D., **648** 307
Vanquickenborne, L.G., **644** 194
van Rooyen, J., **645** 65

Vargas, M.D., **656** 188
Vasil'ko, A., **641** 208
Vaultier, M., **657** 1; **657** 107
Vázquez, J., **641** 67
Vázquez-García, D., **654** 162
Vázquez-López, E.M., **656** 1; **664** 306
Vegas, A., **651** 22
Veiros, L.F., **662** 105
Veith, M., **646** 138; **649** 70; **658** 34
Verkade, J.G., **646** 161; **649** 276; **651** 15
Verpoort, F., **659** 159
Vertlib, V., **651** 5
Vessières, A., **644** 350
Viau, L., **654** 180
Vicente, J., **648** 62; **663** 1; **663** 40; **663** 164
Viciu, M.S., **653** 69
Vila, J.M., **654** 162; **655** 127; **656** 270; **659** 67; **663** 239
Vilar, R., **641** 126; **652** 87
Villafañe, F., **661** 149
Villaseñor, E., **656** 129
Viñas, C., **642** 16; **645** 39; **654** 237; **657** 187; **657** 217; **657** 224; **657** 232; **657** 239; **657** 247; **663** 221
Vincent, H., **657** 91
Vioux, A., **649** 113
Visentin, F., **642** 32; **642** 58; **650** 43
Visseaux, M., **647** 139; **647** 167
Vittal, J.J., **644** 4; **650** 123; **658** 159; **659** 92; **664** 161
Vlaar, M.J.M., **644** 369
Volkov, O., **657** 40
Volkova, O.S., **658** 228
Volland, M.A.O., **641** 220
von Firks, G., **656** 27
von Zezschwitz, P., **653** 129
Voronkov, M.G., **642** 91; **658** 228
Votinova, N.A., **657** 163
Vrazhnov, D.V., **656** 258
Vyakaranam, K., **646** 21

Wachter, J., **659** 22
Wacker, A., **641** 195
Wade, K., **657** 256
Wadepohl, H., **641** 142
Wagner, C., **648** 306; **650** 25
Wagner, M., **652** 11; **664** 94
Wakatsuki, Y., **647** 61
Walendowska, J., **648** 293
Walsh, P.J., **663** 70
Wang, B., **645** 212; **645** 262
Wang, H.-G., **642** 179; **649** 152
Wang, J.-T., **642** 179; **649** 152; **658** 198
Wang, L., **645** 287; **650** 59; **658** 62
Wang, M., **645** 127
Wang, R., **658** 214; **660** 98; **662** 150
Wang, S., **648** 302
Wang, S.-L., **648** 193; **658** 117
Wang, X., **654** 216
Wang, Y., **645** 287; **646** 167; **648** 176; **648** 193; **650** 37; **650** 268; **654** 83; **658** 117; **658** 191; **660** 127
Wang, Z., **645** 168; **646** 161; **654** 16
Wang, Z.-H., **642** 179; **649** 152
Ward, A.J., **642** 186
Ward, B.D., **647** 145
Watanabe, M., **648** 72; **648** 164; **664** 59
Waters, J., **645** 218
Watkins, C.L., **649** 78
Weber, B., **658** 266
Weber, C., **664** 123; **664** 150
Weber, L., **644** 81
Webster, R.D., **644** 136
Weeber, A., **663** 58
Wegner, P., **641** 165
Wei, X.-H., **655** 89
Weibert, B., **651** 66
Weichmann, H., **650** 25
Weidenbruch, M., **646** 39
Weidinger, J., **649** 225
Weinmann, M., **659** 29
Weiss, C.A., **652** 95
Welch, A.J., **657** 217; **663** 221
Welker, M.E., **656** 217
Wen, L., **645** 287
Weng, L., **645** 212; **662** 144
Wenz, K., **662** 23
Werner, H., **641** 203; **661** 1; **661** 137; **661** 181
Wesemann, L., **664** 116
Westcott, S.A., **649** 199
Westerhausen, M., **644** 189
Westman, G., **649** 204
Wheaton, J.R., **650** 123
White, A.H., **650** 141; **650** 188; **655** 227
White, A.J.P., **644** 4; **649** 94; **652** 87
White, J., **659** 10
White, J.M., **654** 3
Whiteley, M.W., **645** 218
Wibbeling, B., **663** 192
Wiberg, N., **649** 246
Wild, S.B., **644** 136
Wildgoose, F.A., **659** 142
Willbold, S., **646** 125
Willemsen, S., **641** 215
William, A.D., **653** 91
Williams, D.J., **644** 4; **649** 94; **652** 87
Williams, N., **645** 65
Willis, A.C., **644** 136
Wilson, C., **647** 205
Wilton-Ely, J.D.E.T., **644** 313
Winchester, W.R., **646** 68
Winter, R.F., **641** 113
Wiseman, M.R., **664** 176
Wojcicki, A., **655** 192
Wolan, A., **657** 129
Wolf, J., **641** 203; **661** 137
Won, Y.C., **660** 161
Wong, W.T., **645** 59
Wong, W.-T., **659** 151
Wong, W.-Y., **655** 39; **659** 107
Wood, J.S., **645** 158
Woodgate, P.D., **654** 140
Woodgate, S.D., **644** 168
Woodward, A.D., **652** 77
Wrackmeyer, B., **641** 173; **646** 125; **649** 225; **649** 232; **656** 71; **656** 97; **657** 3; **657** 146
Wright, D.S., **650** 75
Wright, L.J., **644** 168; **645** 235
Wróblewski, R., **651** 72
Wu, B., **654** 233
Wu, K., **655** 233
Wu, Q.-J., **655** 120
Wu, T., **645** 212
Wu, Y., **660** 139

Xi, Z., **663** 13
Xiang, J., **648** 246
Xiao, M., **646** 68

Xiaozhong, L., **664** 1
Xu, G., **655** 239
Xu, Q., **658** 214
Xu, S., **645** 212; **645** 262
Xu, Z., **648** 93
Xue, W.-M., **656** 281

Yamaguchi, I., **654** 229; **658** 281
Yamaguchi, K., **656** 234; **657** 48
Yamaguchi, R., **649** 289
Yamaguchi, S., **646** 277; **652** 3; **653** 223
Yamaji, T., **664** 59
Yamamoto, A., **653** 5
Yamamoto, T., **653** 195; **654** 229; **658** 281
Yamamoto, Y., **644** 441
Yamasaki, R., **657** 48
Yamazaki, O., **659** 117
Yampolsky, I.V., **657** 123
Yan, C., **650** 59
Yan, C.G., **641** 195
Yan, Y.K., **650** 123
Yáñez, R., **642** 107
Yang, C., **653** 69
Yang, F., **651** 146
Yang, H., **658** 62
Yang, J., **649** 276; **651** 15
Yang, K.-C., **648** 176
Yang, L.-K., **654** 140
Yang, P., **658** 198
Yang, S.-Y., **658** 9
Yao, Y., **647** 180; **662** 144
Yaouanc, J.-J., **664** 214
Yasuda, H., **642** 156; **647** 128; **648** 226; **651** 114; **654** 74; **659** 133; **664** 234
Yasuda, N., **653** 279
Yasuike, S., **656** 234
Yeo, J.S.L., **658** 159; **659** 92
Yih, K.-H., **658** 191
Yin, Y.-Q., **650** 181; **664** 201
Yokoi, T., **645** 228
Yokoyama, R., **642** 80; **648** 164; **650** 279
Yonghong, L., **655** 182
Yonker, C.R., **650** 249
Yörür, Ç., **655** 105
Yoshida, J.-i., **653** 105
Younes, A., **664** 228
Young, V.G., Jr., **649** 268
Youngs, W.J., **654** 224
Younus, M., **649** 94
Yousef, R.I., **655** 111
Yousif, L.Z., **656** 274
Yu, S.-J., **648** 193; **650** 37
Yu, X., **645** 127
Yucel, B., **656** 11

Yun, H., **654** 170
Yus, M., **663** 21

Zabel, M., **659** 22
Zachara, J., **664** 136
Zaidlewicz, M., **657** 129
Zaitseva, N.N., **650** 141; **650** 188
Zakharov, L.N., **642** 20; **649** 100
Zakrzewski, J., **642** 143; **645** 268; **648** 293; **656** 102
Záliš, S., **655** 218
Zambon, A., **642** 58
Zamora, F., **649** 21
Zamudio-Rivera, L.S., **657** 194
Zanello, P., **648** 306
Zanotti, V., **649** 64; **659** 15
Zanotto, L., **642** 32; **642** 64
Zard, S.Z., **644** 404
Zargarian, D., **660** 98
Zeng, G.-H., **656** 228
Zengin, N., **658** 176
Zenneck, U., **641** 90; **644** 357
Zhang, C.-M., **655** 120
Zhang, H., **644** 404; **645** 287; **647** 105
Zhang, J., **650** 123; **655** 120
Zhang, L., **656** 18
Zhang, L.-X., **655** 120
Zhang, W.-Q., **650** 181; **664** 201
Zhang, Y., **645** 59; **651** 146
Zhang, Y.-H., **650** 181
Zhao, C., **662** 120
Zhao, Q.-Y., **650** 181
Zhao, X.-M., **658** 198
Zheng, Q., **641** 53
Zheng, R., **651** 146
Zhezlova, E.V., **642** 20
Zhou, X., **645** 212; **645** 262; **647** 28
Zhou, X.-G., **655** 120
Zhou, Z., **655** 233
Zhu, B.-H., **650** 181
Zhu, H., **655** 167
Zhu, M., **647** 28; **655** 120
Zhu, Y., **660** 139
Zhuang, B., **655** 233
Ziemkowska, W., **651** 72
Ziglio, C.M., **656** 188
Ziller, J.W., **649** 252
Zimmer, M., **649** 70; **658** 34
Zimniak, A., **645** 274
Zong, R., **660** 78
Zora, M., **656** 11
Zsolnai, L., **664** 123
Zucca, A., **664** 77
Zúñiga-Villarreal, N., **645** 54
Zuno-Cruz, F.J., **649** 43; **660** 153

Available online at www.sciencedirect.com
SCIENCE DIRECT®
Journal of Organometallic Chemistry Supplement (2003) 21–107
Journal of Organometallic Chemistry
www.elsevier.com/locate/jorganchem

Cumulative Subject Index of Volumes 641–664

Ab initio
A theoretical study of linear germacyanogen isomers, **659**, 121
Silanones and metasilicates from negatively charged $\equiv SiO^{(-)}$ and $=SiO_2^{(2-)}$ precursors. Theoretical study, **642**, 163
Ab initio calculations
Phosphorus stabilized carbenes: theoretical predictions, **643-644**, 278
Quantum chemical studies on elementary fragments of three-coordinated methylaluminoxanes, **648**, 49
Structure–property relationships in phosphole oligomers: a theoretical insight, **643-644**, 194
The effect of trimethylsilyl substituents on the ring-slippage of bis-indenyl-molybdenocene derivatives, **648**, 270
Very strong anionic homoaromaticity in (*deloc*-1,3,4)-1-sila-3,4-diboracyclopentane-1-ides, the importance of the energy of the reference system for homoaromatic stabilization energies, **646**, 262
Acetaldazine
Structural studies of the $C_4H_8N_2Fe_2(CO)_6$ complex obtained by cyclization of acetaldazine in the presence of dodecacarbonyl-triiron: investigations by X-ray diffraction and NMR of μ-1,2-(1,2-diaza-3-methylcyclopentane)diyl-bis(tricarbonyliron), **645**, 274
Acetamide
Synthesis and derivatization of the 2-amino-*closo*-decaborate anion $[2\text{-}B_{10}H_9NH_3]^-$, **657**, 163
Acetate
Mono-indenyl and cyclopentadienyl derivatives of molybdenum(IV) with a 16 valence-electron configuration, **663**, 78
Reactions of the cationic diruthenium carbonyl complex $[Ru_2(\mu\text{-}dppm)_2(CO)_4(\mu,\eta^2\text{-}O_2CMe)]^+$ with bidentate ligands; intramolecularly assisted stereospecific synthesis via the second-sphere face-to-face π–π stacking interactions, **650**, 268
Acetonitrile
Acetonitrile activation in di-iron μ-carbyne complexes: synthesis and structure of the cyanomethyl complex $[Fe_2(\mu\text{-}CNMe_2)(\mu\text{-}CO)(CO)(CH_2CN)(Cp)_2]$, **649**, 64
Acetylacetonate
Mono-indenyl and cyclopentadienyl derivatives of molybdenum(IV) with a 16 valence-electron configuration, **663**, 78
Reactions of the cationic diruthenium carbonyl complex $[Ru_2(\mu\text{-}dppm)_2(CO)_4(\mu,\eta^2\text{-}O_2CMe)]^+$ with bidentate ligands; intramolecularly assisted stereospecific synthesis via the second-sphere face-to-face π–π stacking interactions, **650**, 268
Synthesis, characterisation and molecular structure of $[Rh(COE)_2(acac)]$ (COE = cyclooctene, $\eta^2\text{-}C_8H_{14}$), an important starting material for the preparation of rhodium catalyst precursors, **649**, 199
Acetylacetonato–
New insights into the reactivity of the tantalocene hydride Cp'_2TaH_3 ($Cp' = \eta^5\text{-}{}^tBuC_5H_4$). Synthesis and characterisation of cationic Ta(V) complexes with 0,0 and *S*,*N* chelating ligands, **656**, 139
Acetylene reactions
Synthesis of 1,4-disilacyclohexa-2,5-dienes, **649**, 276
Acetylenes
Synthesis and reactivity of P-acetylenic (silylamino)phosphines, **646**, 223
Acetylide
Organometallic complexes for nonlinear optics: Part 25. Quadratic and cubic hyperpolarizabilities of some dipolar and quadrupolar gold and ruthenium complexes, **642**, 259
Synthesis, characterization and electrochemistry of diruthenium complexes linked by aryl acetylide bridges, **660**, 1
Acid anhydrides
Rhodium-catalyzed coupling of sodium tetraphenylborate with acid anhydrides in the presence or absence of norbornene, **648**, 297
Acid hydrolysis
Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, **643-644**, 4
π-Acidity
Synthesis and electrochemical behaviour of σ,η^2-acetylide-bridged early–late complexes;: The solid-state structure of $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ti(C{\equiv}CSiMe_3)_2]Pd(PPh_3)$, **664**, 123
Acrylate
Enantioselective synthesis of phosphinyl peptidomimetics via an asymmetric Michael reaction of phosphinic acids with acrylate derivatives, **646**, 212
Acrylates
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of $[PPN]^+[CH_3CH(COOEt)\text{-}Cr(CO)_5]^-$, **643-644**, 27
Actinide
Recent advances in f element reduction chemistry, **652**, 61
The expansion of divalent organolanthanide reduction chemistry via new molecular divalent complexes and sterically induced reduction reactivity of trivalent complexes, **647**, 2
Activation
Characterization of a metallocene/co-catalyst system supported on silica by Fourier-Transform Raman spectroscopy, **651**, 80
Activation parameters
Syntheses, structure, and Berry pseudorotation of ruthenium-, iron-, and cobalt-phosphorane complexes, **646**, 204
Activation small molecule
Synthesis and reactivity of organolanthanoid complexes containing N and S ligands, **647**, 180
Acyclic
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Acyl
The synthesis and characterization of 1-formyl-2-acylcyclopentadienylthallium compounds, **642**, 268
4-Acylpyrazolones
The reactivity of new (1,5-cyclooctadiene)rhodium acylpyrazolonates towards N- and P-donor ligands: X-ray structures of $[Rh(1,5\text{-}COD)Q^s]$, $[Rh(1,5\text{-}COD)(phen)]Q^s\cdot 0.5H_2O$ (HQ^s = 1-phenyl-3-methyl-4-(2-thenoyl)-pyrazol-5-one) and $[Rh(1,5\text{-}COD)Br]_2$, **651**, 5

Elsevier Science B.V.
doi:10.1016/S0022-328X(03)00335-8

4-Acyl-5-pyrazolones
Organotin(IV) derivatives of novel β-diketones: Part V. Synthesis and characterization of di- and triorganotin(IV) derivatives of 4-acyl-5-pyrazolones modified in position 3 of the pyrazole. Crystal structure of (1,3-diphenyl-4-benzoyl-pyrazolon-5-ato)triphenyltin(IV), **645**, 134
Adaptable coordination modes
Adaptable coordination modes of conjugated 1,3-diene: uniqueness of *s-trans* coordination, **663**, 5
Addition reactions
Non-catalyzed addition reactions of $Cl_3SiSiCl_3$ with 1,2-diketones, 1,2-quinones and with a 1,4-quinone, **651**, 15
1,2-Adduct
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of $[PPN]^+[CH_3CH(COOEt)\text{-}Cr(CO)_5]^-$, **643-644**, 27
Agostic
Synthesis and structural characterisation of 'solvent-free' lithium–calcium hexamethyldisilazide, $[Li\{\mu\text{-}N(SiMe_3)_2\}_2Ca\{N(SiMe_3)_2\}]$, exhibiting a double ration of agostic $H_3C\cdots Li$ and $H_3C\cdots Ca$ intramolecular interactions, **648**, 288
Air-stable ligands
'User-friendly' primary phosphines and an arsine: synthesis and characterization of new air-stable ligands incorporating the ferrocenyl group, **656**, 120
Alcohols
Catalytic oxidation of alcohols with allyl diethyl phosphate and palladium acetate, **650**, 151
Aldehydes
Asymmetric addition of diethylzinc to aromatic aldehydes by chiral ferrocene-based catalysts, **649**, 258
Reaction of $[RhCl(CO)_2]_2$ or $[RhCl(COD)]_2$ with *o*-(diphenylphosphino)benzaldehyde. Formation of hemiaminals in the subsequent reaction with dihydrazones, **648**, 149
Aldehyde trimethysilylcyanation
$P(MeNMCH_2CH_2)_3N$: an effective catalyst for trimethylsilycyanation of aldehydes and ketones, **646**, 161
Aldimines
Direct synthesis of unsaturated β-amino acids, **662**, 172
Aldol reaction
Chiral arene ruthenium complexes: Part 3. [Ruthenium(η^6-arene)(η^4-1,5-cyclooctadiene)] complexes with N or O donor functions in the arene side chain, **641**, 90
Alkalimetal oligosilanylchalcogenolates
Bis(oligosilanyl)chalcogenides $[(Me_3Si)_xMe_{3-x}Si]_2E$, alkalimetal oligosilanylchalcogenolates $(Me_3Si)_xMe_{3-x}Si\text{–}EM^I$ and oligosilanylchalcogenols $(Me_3Si)_xMe_{3-x}Si\text{–}EH$ (E = S, Se, Te): Syntheses and NMR study, **660**, 36
Alkali metals
Novel fluorenyl alkali metal DIGLYME complexes: synthesis and solid state structures, **656**, 89
Phosphane- and phosphorane *Janus Head* ligands in metal coordination, **661**, 111
Reactions of *cyclo*-(*t*-Bu_4Sb_4) with alkali metals; syntheses and crystal structures of $[M(L)_n(t\text{-}Bu_4Sb_3)]$ (M = Na, K; *n* = 1, 2) and $[K(L)(t\text{-}Bu_3Sb_2)]$ (L = $(Me_2NCH_2CH_2)_2NMe$), **660**, 167
The activation of C–H bonds in internal alkenes and dienes by {NiCp} species formed in the reaction of nickelocene with alkali metals, **663**, 249
Alkaline earth metal bis(2-phosphaethynolates)
Synthesis of alkaline earth metal bis(2-phosphaethynolates), **643-644**, 189
Alkaline earth metals
Phosphane- and phosphorane *Janus Head* ligands in metal coordination, **661**, 111
Alkane complexes
Fluxional behavior of chromium and tungsten complexes of monodentate bis(trimethylphosphine)diborane(4), $[M(CO)_5\text{-}(\eta^1\text{-}B_2H_4\cdot 2PMe_3)]$ (M = Cr, W): A model case for alkane–metal complexes, **659**, 102
Alkene
A tetrameric copper(I) alkoxide with a π-tethered ligand: 2-allyl-6-methylphenoxocopper(I), **649**, 204
Alkene activation
The activation of C–H bonds in internal alkenes and dienes by {NiCp} species formed in the reaction of nickelocene with alkali metals, **663**, 249
Alkene analogues
Some recent advances in the chemistry of silicon and its homologues in low coordination states, **646**, 39
Alkene isomerisation
Synthesis of bis-oxazoline-ruthenium(II)-arene complexes. Combined catalytic isomerisation and Claisen rearrangement of bis-allyl ether, **662**, 63
Alkene oxidation
Isolation of a stable Cr(V) intermediate in the oxidation of aryl-substituted alkenes by chromylchloride, **641**, 121
Alkene polymerization
Why propene is not polymerized by $(Cp^*_2YH)_2$: reactions of yttrium alkyl complexes with alkenes produce allyl and vinyl yttrium complexes, **663**, 91
Alkenyl
Regioselective penta-addition of 1-alkenyl copper reagent to [60]fullerene. Synthesis of penta-alkenyl FCp ligand, **652**, 31
Alkenylboronates
New cascade and multiple cross-coupling reactions for the efficient construction of complex molecules, **653**, 129
Alkenyl halide
Discovery of the cross-coupling reaction between Grignard reagents and C(sp^2) halides catalyzed by nickel–phosphine complexes, **653**, 23
Alkenylsilanes
Ruthenium-catalyzed hydrosilylation of terminal alkynes: stereodivergent synthesis of (*E*)- and (*Z*)-alkenylsilanes, **645**, 192
Alkenylsilanols
Efficient and stereoselective cross-coupling with highly substituted alkenylsilanols, **653**, 98
Alkoxide
A tetrameric copper(I) alkoxide with a π-tethered ligand: 2-allyl-6-methylphenoxocopper(I), **649**, 204
Alkoxides
Organolanthanide chemistry in the gas phase, **647**, 216
Reactions of cyclopentadienylmolybdenum compounds with bismuth alkoxides, **641**, 9
η^3-(2-Alkoxyallyl)
Reactions of $[(PPh_3)_2Pt(\eta^3\text{-}CH_2CCPh)]^+$ with oxygen nucleophiles and chemistry of resultant $[(PPh_3)_2Pt(\eta^3\text{-}CH_2C(OR)CHPh)]^+$ complexes, **655**, 192
Alkoxycarbonyl substitutents
Alkoxycarbonyl substituted ruthenium mono(bipyridine) complexes: steric effects of the bipyridine substituents, **654**, 8
Alkoxysilane
A novel and convenient preparation of hypophosphite esters, **643-644**, 154
4-Alkoxy-4′-stilbazole
Angular (*cis*-stilbazole) geometry in octahedral dimethyldihalidoplatinum(IV) complexes: potential as metallomesogens and X-ray structure of $[PtMe_2I_2(NC_5H_4CH{=}CHC_6H_4OC_7H_{15})_2]$, **645**, 206
Alkyl
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, **643-644**, 331

Alkylammonium tetraphenylborates
Reactivity of ammonium and iminium tetraphenylborates towards Pd(0)-complexes: selective allyl or proton transfer to Pd(0). Evidence of formation of the species $[HPd(dppe)_2][BPh_4]$, **662**, 112
Alkylation
Reaction of ruthenium complexes containing heterocyclic thiazine–thione ligand, **660**, 127
Retrocyclization reactions of *gem*-dibromo(ferrocenyl)cyclopropanes, **645**, 183
Alkylboration
From bis(silylamino)tin dichlorides via di(1-alkynyl)-bis(silylamino)tin to new heterocycles by 1,1-organoboration, **649**, 232
Alkyl–chromium bonds
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of $[PPN]^+[CH_3CH(COOEt)Cr(CO)_5]^-$, **643-644**, 27
Alkyl complexes
Dialkyl titanium complexes that contain a sulfur-linked bis(phenolato) ligand: The structure of an olefin polymerization catalyst precursor, **663**, 158
Alkyl coupling
Homo coupling, disproportionation and cross coupling of alkyl groups. Role of the transition metal catalyst, **653**, 11
Alkyl groups
Synthesis and characterization of fluoroalkyldistannoxanes, **648**, 246
Alkyl hypophosphite
A novel and convenient preparation of hypophosphite esters, **643-644**, 154
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, **643-644**, 381
Alkylidenediphosphorylation
Synthesis of P-chiral enephosphonic acid derivatives, **662**, 83
Alkylidenefuranone
Coupling of ferrocenyl chromium carbene complex with cyclobutenediones, **656**, 11
Alkylideneindolizidines
A convergent total synthesis of pumiliotoxins A and B via palladium-catalyzed cross-coupling reaction of homoallylic organozinc compounds with vinyl iodides, **653**, 229
Alkylisocyanates
Organo-rare-earth-metal initiated living polymerizations of polar and nonpolar monomers, **647**, 128
Alkyl isocyanide
Syntheses, X-ray structures, and reactions of ruthenium carbonyl complexes containing 1,1-dithiolates, **650**, 37
Alkyl lithium
Reactions of bulky alkyl lithium reagents with a phosphaalkyne ($P{\equiv}CBu^t$): synthesis and structural characterisation of a mixed valent phosphorus cage compound, $P^{III}\{\mu\text{-}C(H)(Bu^t)\}_2\{\mu\text{-}C(H)(SiMe_3)Si(Me)_2C(H)_2\}P^V{=}C(SiMe_3)_2$, and a phosphaalkenyl-substituted η^3-azaallyl-lithium complex, $[Li(tmeda)\{C(SiMe_3)(2\text{-}NC_5H_3Me\text{-}6)[P{=}C(Bu^t)(SiMe_3)]\}]$, **645**, 256
Alkyl (meth)acrylate
Organo-rare-earth-metal initiated living polymerizations of polar and nonpolar monomers, **647**, 128
Alkylperoxides
New insights into the reaction of *t*-butylhydroperoxide with dichloro- and dimethyl(dioxo)molybdenum(VI), **649**, 108
Alkyls
Synthesis and structures of crystalline bis(trimethylsilyl)methanido complexes of potassium, calcium and ytterbium, **663**, 263
The stable silylene $Si[(NCH_2^tBu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[Li\{Si(SiMe_3)_3\}(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], **651**, 150
The stable silylene $Si[(NCH_2^tBu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[LiSi(SiMe_3)_3(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], **643-644**, 272
Alkyne
Rational synthesis of tricobalt-molybdenum and -tungsten butterfly clusters with alkyne ligands, **659**, 142
Reactions of acylferrate anion $[CH_3COFe(CO)_4]^-$ with methyl methyl iodide and acetylenes. Synthesis of mono- and dinuclear alkenyl ketone iron complexes. X-ray structure of $[NEt_4][I\text{-}Fe(CO)_3(COCPh)_2)]$, **642**, 107
Ruthenium cluster carbonyls containing ligands derived from ferrocenylalkynes, **650**, 188
Synthesis and characterisation of new platinum ethynyl dimers and polymers with pendant ferrocenyl groups, **649**, 94
Alkyne and diyne oligomerisation
The crystal structure of $[Mo(NCS)(CO)_2(\eta^3\text{-}C_3H_5)(NC\text{-}Me)_2]\cdot MeCN$ and the reactions of $\{Mo(CO)_2(\eta^3\text{-}C_3H_5)^+\}$ containing species with symmetric alkynes, **664**, 176
Alkyne/dialkyltungsten complexes
Steric isomerization of alkyne–dialkyltungsten complexes with a chelating diaryloxo ligand: crystal structures of C_s- and C_1-$W(\eta^2\text{-}RC{\equiv}CR)[2,2'\text{-}S(4\text{-}Me\text{-}6\text{-}R'C_6H_2O)_2](CH_2SiMe_3)_2$, **664**, 234
Alkyne ligand
Synthesis of *cis*-dichloride complexes of Group 6 transition metals bearing alkyne and chalcogen-bridged chelating bis(aryloxo) ligands as catalyst precursors for ring-opening metathesis polymerization, **654**, 74
Alkynes
η^1-Alkynylplatinum(II) complexes with cycloocta-1,5-diene and tri(1-cyclohepta-2,4,6-trienyl)phosphane ligands, **641**, 173
A simple route to (tetraethynylcyclobutadiene)cyclopentadienylcobalt, **652**, 21
Conversion of alkynes to cyclic imides and anhydrides using reactive iron carbonyls prepared from $Fe(CO)_5$ and $Fe_3(CO)_{12}$, **649**, 209
Coupling reactions of manganese(I) cyclometallated compounds derived from heterocyclic N-donor ligands with alkynes, **656**, 270
$(\eta^5$-Cyclopentadienyl)[η^2-bis(*tert*-butylsulfonyl)acetylene](carbonyl)cobalt: An electrophilic reagent to yield CpCo-stabilized cyclobutadiene derivatives, **641**, 102
From bis(silylamino)tin dichlorides via di(1-alkynyl)-bis(silylamino)tin to new heterocycles by 1,1-organoboration, **649**, 232
Hydrosilylation of alkynes catalyzed by platinum on carbon, **645**, 1
Novel organotin halides. Organometallic substituted stannoles and alkene derivatives with tin–chlorine and tin–bromine bonds—exceptionally small magnitude of coupling constants $|^1J(^{119}Sn, ^{13}C)|$, **646**, 125
Novel titana-2,4-cyclopentadienes by 1,1-alkylboration, **649**, 225
Reactivity of some poly-1-alkynylsilicon and -tin compounds towards triallylborane—routes to novel heterocycles, **657**, 146
Recent studies on alkynyl complexes of the Group 11 and 12 metals, **641**, 126
Regioselective hydrostannations catalyzed by molybdenum isonitrile complexes, **641**, 26
Ruthenium-catalyzed hydrosilylation of terminal alkynes: stereodivergent synthesis of (*E*)- and (*Z*)-alkenylsilanes, **645**, 192
Alkynethiolates derivatives
Alkynethiolate ligands in the syntheses of iron carbonyl derivatives. Crystal structure of $[(\eta^5\text{-}C_5H_5)Fe(CO)_2(SC{\equiv}CSiMe_3)]$, **649**, 21
Alkynyl
Reactions of $Ru(C{\equiv}CPh)(L_2)Cp^*$ (L_2 = dppm, dppe) with tetracyanoethene: cycloaddition, formation of monodentate dppm and dppmO complexes and migration of CN to ruthenium, **650**, 141

Alkynyl and butadiynyl complexes
Syntheses and structures of monoplatinum model complexes for diplatinum polyynediyl adducts $L_nPt(C{\equiv}C)_2PtL_n$, **641**, 53
Alkynyl-bridged trinuclear magnesium compound
Synthesis, characterization and crystal structures of alkyl-, alkynyl-, alkoxo- and halo-magnesium amides, **648**, 176
Alkynyliodonium salt
1,3-Dipolar cycloaddition of alkynyliodonium salts with a nitrile oxide. Synthesis and reactivity of isoxazolyliodonium salts, **646**, 196
Alkynyl ligands
Directing role of anions in the syntheses of the silver–alkynyl cages $[Ag_{14}(C{\equiv}C'Bu)_{12}X][BF_4]$ (X = F, Cl, Br) and silver–alkynyl polymers $[Ag_3(C{\equiv}C'Bu)_2(X)]_n$ (X = Tos, NO_3), **652**, 87
Alkynyls
Recent studies on alkynyl complexes of the Group 11 and 12 metals, **641**, 126
Alkynylsilane
Hydrosilylation of alkynylsilanes utilizing organolanthanide and Group 3 metallocene complexes, **647**, 225
Allene
The marked influence of steric and electronic properties of ancillary pyridylthioether ligands on the rate of allene insertion into the palladium–carbon bond, **650**, 43
Allenes
Polylithiumorganic compounds: Part 28. The reaction of allene and alkyl substituted allenes with lithium metal, **642**, 1
Allenylidene
Allenylidene-ruthenium-arene precatalyst for ring opening metathesis polymerisation (ROMP), **663**, 235
Allenylidenes
Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, **643-644**, 231
η^3-Allenyl–propargyl
Reactions of $[(PPh_3)_2Pt(\eta^3\text{-}CH_2CCPh)]^+$ with oxygen nucleophiles and chemistry of resultant $[(PPh_3)_2Pt(\eta^3\text{-}CH_2C(OR)CHPh)]^+$ complexes, **655**, 192
Allyl
Allyl complexes of molybdenum with Schiff base ligands. The crystal structures of $[MoCl(CO)_2\{N(C_6H_4\text{-}2\text{-}OMe){=}C(Me)\text{-}C_5H_4N\}(\eta^3\text{-}C_3H_5)]$ and $[MoCl(CO)_2\{N(Me){=}C(Ph)\text{-}C_5H_4N\}(\eta^3\text{-}C_3H_5)]$ are described, **660**, 91
New studies on the apparent allyl rotation in scorpion-like palladium complexes. The influence of non-directly bonded groups. X-ray molecular structures of $[Pd(\eta^3\text{-}2\text{-}Me\text{-}C_3H_4)L]TfO$, L = bpzmArOMe and bpz*mCy, **650**, 210
Allylation
Allylboration of functionalized isoquinolines, **657**, 123
Allylboration
Allylboration of functionalized isoquinolines, **657**, 123
From bis(silylamino)tin dichlorides via di(1-alkynyl)-bis(silylamino)tin to new heterocycles by 1,1-organoboration, **649**, 232
Allyl complex
Why propene is not polymerized by $(Cp^*_2YH)_2$: reactions of yttrium alkyl complexes with alkenes produce allyl and vinyl yttrium complexes, **663**, 91
Allyl complexes
Non-hindered ansasamarocenes, versatile catalysts for diene/olefin/polar monomer copolymerisations. What is really the active species?, **647**, 167
Synthesis, characterization, and reactivity of half-sandwich Ru(II) complexes containing phosphine, arsine, stibine, and bismutine ligands, **649**, 55
π-Allyl complexes
Isomerism of (π-1,3-dimethylallyl)(phosphinooxazoline)Pd complexes: a comparison between experiment and theory, **641**, 67
Allyldiene ligand
Synthesis and crystal structures of μ-1,3-bis(η^5-tetramethylcyclopentadienyl)-1,1,3,3-tetramethyldisiloxane)[η^2-bis(trimethylsilyl)ethyne]titanium(II) and a doubly tucked-in product of its thermolysis, **658**, 235
Allyl diethyl phosphate
Catalytic oxidation of alcohols with allyl diethyl phosphate and palladium acetate, **650**, 151
Allyl ether in catalysis
Synthesis of bis-oxazoline-ruthenium(II)-arene complexes. Combined catalytic isomerisation and Claisen rearrangement of bis-allyl ether, **662**, 63
Allylic alcohols
Homogeneously catalysed isomerisation of allylic alcohols to carbonyl compounds, **650**, 1
Allylic alkylation
Allyl–palladium complexes with fluorinated benzene thiolate ligands. Examination of the electronic effects in the Pd-catalyzed allylic alkylation reaction with the catalytic system $[(\eta^3\text{-}C_3H_5)Pd(\mu\text{-}SR_f)]_2/PR_3$, **654**, 16
Allylic phosphates
Iridium complex-catalyzed carbonylation of allylic phosphates, **651**, 137
π-Allyl iridium
Iridium complex-catalyzed carbonylation of allylic phosphates, **651**, 137
Allyl ligand
Investigations on the trigonal twist process in the pseudooctahedral complexes $[MX(CO)_2(P\text{–}P)(\eta^3\text{-}R)]$ (M = Mo or W; X = halide or pseudohalide; P–P = bidentate P-donor ligand; R = cycloheptatrienyl, cyclohexenyl or cyclooctenyl), **645**, 218
Allyl ligands
Formation of novel unsaturated fluorinated ligands by metal induced C–C coupling reaction of difluoroallene with fluoromethylidyne ligands of $Fe_3(CO)_9(\mu_3\text{-}CF)_2$, **641**, 215
2-Allyl-6-methylphenol
A tetrameric copper(I) alkoxide with a π-tethered ligand: 2-allyl-6-methylphenoxocopper(I), **649**, 204
Allyl palladium complexes
Allyl–palladium complexes with fluorinated benzene thiolate ligands. Examination of the electronic effects in the Pd-catalyzed allylic alkylation reaction with the catalytic system $[(\eta^3\text{-}C_3H_5)Pd(\mu\text{-}SR_f)]_2/PR_3$, **654**, 16
Allyl silanes
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, **643-644**, 324
Allylsilanes
Catalytic asymmetric cross-coupling, **653**, 41
Allyl transfer
Reactivity of ammonium and iminium tetraphenylborates towards Pd(0)-complexes: selective allyl or proton transfer to Pd(0). Evidence of formation of the species $[HPd(dppe)_2][BPh_4]$, **662**, 112
Aluminate
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Aluminium
A new class of linked-bis(*N*,*N*′-dialkylamidinate) ligand: applications in the synthesis of bimetallic aluminium complexes, **662**, 178
Steric effects in alkylalane dioldiates: $[^tBuAl(OC(CH_3)_2CH_2C\text{-}(CH_3)_2O)]_2$ a new (monoalkyl)alane *O*,*O*′-chelate complex, **651**, 72
Syntheses of polyaluminium compounds by hydroalumination reactions, chelating Lewis acids possessing two and four coordinatively unsaturated aluminium atoms, **664**, 110

Aluminium hydride
Structural and spectroscopic studies of carbene and N-donor ligand complexes of Group 13 hydrides and halides, **656**, 203
Aluminoxanes
Quantum chemical studies on elementary fragments of three-coordinated methylaluminoxanes, **648**, 49
Aluminum
Imido analogs of aluminophosphates: syntheses and X-ray structures of $\{LiAl[OP(N^tBu)_2(NH^tBu)]_2\}_2$ and the mono- and di-methylaluminum complexes of the anions $[OP(N^tBu)_x(NH^tBu)_{3-x}]^{x-}$ $(x = 1, 2)$, **646**, 107
Synthesis and reactivity of $Al(Et)q'_2$ (q′ = 2-methyl-8-quinolinolato) and crystal structures of $[Al(Et)_2q]_2$ and Alq'_2q (q = 8-quinolinolato), **654**, 229
Aluminum complexes
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, **643-644**, 53
Ambident anions
Metalated 1,3-azaphospholes: synthesis of lithium-1,3-benzazaphospholides and reactivity towards organoelement and organometal halides, **646**, 113
Amide
Synthesis and structural characterisation of 'solvent-free' lithium–calcium hexamethyldisilazide, $[Li\{\mu\text{-}N(SiMe_3)_2\}_2Ca\{N(SiMe_3)_2\}]$, exhibiting a double ration of agostic $H_3C\cdots Li$ and $H_3C\cdots Ca$ intramolecular interactions, **648**, 288
Amides
Aspects of non-classical organolanthanide chemistry, **647**, 71
From bis(silylamino)tin dichlorides via di(1-alkynyl)-bis(silylamino)tin to new heterocycles by 1,1-organoboration, **649**, 232
Novel titana-2,4-cyclopentadienes by 1,1-alkylboration, **649**, 225
Synthesis of zirconocene amides and ketimides and an investigation into their ethylene polymerization activity, **656**, 63
Amidinate
A new class of linked-bis(*N*,*N*′-dialkylamidinate) ligand: applications in the synthesis of bimetallic aluminium complexes, **662**, 178
Amidinate ligands
Synthesis, characterization of homoleptic lanthanide amidinate complexes and their catalytic activity for the ring-opening polymerization of ε-caprolactone, **662**, 144
Amidine
A new class of linked-bis(*N*,*N*′-dialkylamidinate) ligand: applications in the synthesis of bimetallic aluminium complexes, **662**, 178
Mono-indenyl and cyclopentadienyl derivatives of molybdenum(IV) with a 16 valence-electron configuration, **663**, 78
Amido
Towards f and d electron interactions in amido metal complexes, **647**, 12
Amido-cyclopentadienyl ligand
Metalation of aromatic heterocycles by yttrium alkyl complexes that contain a linked amido-cyclopentadienyl ligand: synthesis, structure and Lewis base adduct formation, **647**, 158
Amidogallium compounds
Si–C bond cleavage in the reaction of gallium chloride with lithium bis(trimethylsilyl)amide and thermolysis of base adducts of dichloro(trimethylsilyl)amido gallium compounds, **649**, 268
Amination
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, **643-644**, 125
Amine
Synthesis and derivatization of the 2-amino-*closo*-decaborate anion $[2\text{-}B_{10}H_9NH_3]^-$, **657**, 163
Amine derivatives
Photochemical intermediates of *trans*-$Rh(CO)L_2Cl$ where L = PMe_3, PBu_3, and *i*-Pr_2HN and *cis*-$Rh(CO)_2$(*i*-Pr_2HN)Cl in frozen organic glasses, **652**, 95
Amines
Facile syntheses of new multidentate (phosphino)amines: X-ray structure of 1,4-$\{(OC)_4Mo(Ph_2P)_2NCH_2\}_2C_6H_4$, **664**, 294
Amino acid
Cyclopalladation of Schiff bases from phenylalanine and 2-phenylglicine, **663**, 277
β-Amino acids
β-Ferrocenyl-β-amino alcohols: a new class of central chiral ferrocene derivatives, **642**, 212
β-Amino alcohols
β-Ferrocenyl-β-amino alcohols: a new class of central chiral ferrocene derivatives, **642**, 212
Aminoalkylphosphinic acids
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, **643-644**, 381
2-Aminobenzenethiolato–
New insights into the reactivity of the tantalocene hydride Cp'_2TaH_3 ($Cp' = \eta^5$-^{t}BuC$_5$H$_4$). Synthesis and characterisation of cationic Ta(V) complexes with 0,0 and *S*,*N* chelating ligands, **656**, 139
(Amino)(boryl)carbene
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)iminomethanes via possible generation of (amino)(boryl)carbene species, **643-644**, 508
Aminocarbene complexes
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, **643-644**, 105
Amino-functionalised silyl anions
The stable silylene $Si[(NCH^t_2Bu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[Li\{Si(SiMe_3)_3\}(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], **651**, 150
The stable silylene $Si[(NCH^t_2Bu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[LiSi(SiMe_3)_3(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], **643-644**, 272
Aminoindenyl
Bis(2-*N*,*N*′-methylpiperazinoindenyl)zirconium dichloride. Crystal structure of bis(2-*N*,*N*′-methylpiperazinoindenyl)$ZrCl_2$, **659**, 64
Aminomethylferrocene
Synthesis and biological activity of novel cyanoacrylates containing ferrocenyl moiety, **655**, 182
Aminophosphine
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, **643-644**, 98
Aminophosphine catalyst
$P(MeNMCH_2CH_2)_3N$: an effective catalyst for trimethylsilycyanation of aldehydes and ketones, **646**, 161
Aminophosphite
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, **643-644**, 98
Aminopyridinato
Towards f and d electron interactions in amido metal complexes, **647**, 12
4-Amino-2-pyrimidine-thiol
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, **643-644**, 313
Aminostannanes
8-Sila-4-stanna-*s*-tetrahydroindacenes as synthons for Me_2Si-bridged zirconocenes: formation from biscyclopentadienyl silanes by reaction with aminostannanes, **660**, 85
Amino-substituents
Synthesis and reactivity of the rhodium monocarbollide complexes [1-NH=CMe_2-2-Cl-2-PPh_3-*closo*-2,1-$RhCB_{10}H_{10}$] and [1-NH_3-2-Cl-2-PPh_3-*closo*-2,1-$RhCB_{10}H_{10}$], **651**, 34

Amino sugar
Synthesis and electrochemistry of 5-ferrocene-glucosamide, 5-ferrocene-glucosamide phosphate and 5-ferrocene-amido-5-adenosine in aqueous solution, **648**, 81
Aminotin compounds
Novel organotin halides. Organometallic substituted stannoles and alkene derivatives with tin–chlorine and tin–bromine bonds—exceptionally small magnitude of coupling constants $|^1J(^{119}Sn, ^{13}C)|$, **646**, 125
Amorphous polypropylene
Indenyl-amido titanium and zirconium dimethyl complexes: improved synthesis and use in propylene polymerization, **664**, 5
AM1 semiempirical calculations
Difluorenylsilane derivatives, a class of compounds exhibiting strong intra- and intermolecular C–H···π interactions. Crystal and molecular structures of bis(9-methylfluoren-9-yl)dimethylsilane and (9-methylfluoren-9-yl)(fluoren-9-yl) dimethylsilane, **659**, 95
[2+2] and [3+2] Cycloadditions
Bis(η^5-cyclopentadienyl)- and bis(η^5-indenyl)metallacycles of titanium and zirconium from methylenecyclopropanes by oxidative coupling, **656**, 288
2,7- and 2,10-Diferrocenyl-1,6-methano[10]annulene
Cofacial interaction of ferrocenyl groups and metal atom motional anisotropy in [10]annulene organometallics, **658**, 210
Anilinium hypophosphite
Palladium-catalyzed cross-coupling reaction of anilinium hypophosphite with alkenyl bromides and triflates: application to the synthesis of GABA analogs, **653**, 252
2-Anilinopyridinate
Synthesis, characterization and electrochemistry of diruthenium complexes linked by aryl acetylide bridges, **660**, 1
Anionic
The first anionic arenediethynylgold(I) complexes, **663**, 40
Anionic complex
Convenient preparation of Li[(η^5-C_5Me_5)M(CO)$_2$] (M = Ru, Fe) by the reaction of (η^5-C_5Me_5)M(CO)$_2$H with *n*-BuLi, **645**, 201
Anion recognition
Recent studies on alkynyl complexes of the Group 11 and 12 metals, **641**, 126
Anions
Directing role of anions in the syntheses of the silver–alkynyl cages $[Ag_{14}(C{\equiv}C^tBu)_{12}X][BF_4]$ (X = F, Cl, Br) and silver–alkynyl polymers $[Ag_3(C{\equiv}C^tBu)_2(X)]_n$ (X = Tos, NO_3), **652**, 87
Very strong anionic homoaromaticity in (*deloc*-1,3,4)-1-sila-3,4-diboracyclopentane-1-ides, the importance of the energy of the reference system for homoaromatic stabilization energies, **646**, 262
Annulation
Recent advances on the synthetic applications of the dithioacetal functionality, **653**, 209
ansa-Carbon chain
Solid-state structures of persubstituted titanocene chlorides bridged with long aliphatic *ansa*-chains, **642**, 148
Ansa-Lanthanoidocene
Synthesis and crystal structure of one carbon-atom bridged lutetium complex $[Ph_2C(Flu)(Cp)]LuN(TMS)_2$ and catalytic activity for polymerization of polar monomers, **645**, 82
ansa-Metallocene
Synthesis and crystal structure of highly soluble ansa-titano- and zirconocene dichloride complexes $[Me_2Si(\eta^5\text{-}C_5H_2(SiMe_3)_2]_2MCl_2$ (M = Ti, Zr), **649**, 15
ansa-Metallocene complexes
Niobium, titanium, zirconium and hafnium complexes incorporating germanium bridged *ansa* ligands. X-Ray crystal structures of $[Zr\{Me_2Ge(\eta^5\text{-}C_5Me_4)_2\}Cl_2]$ and $[M\{Me_2Ge(\eta^5\text{-}C_5Me_4)(\eta^5\text{-}C_5H_4)\}Cl_2]$ (M = Zr, Hf), **656**, 129
ansa-Titanocene complexes
Synthesis and crystal structures of μ-1,3-bis(η^5-tetramethylcyclopentadienyl)-1,1,3,3-tetramethyldisiloxane)[η^2-bis(trimethylsilyl)ethyne]titanium(II) and a doubly tucked-in product of its thermolysis, **658**, 235
ansa-Zirconocene
Mechanisms of Sn-to-Zr cyclopentadienyl transfer in the formation of Me_2Si-bridged zirconocenes from sila-stanna-tetrahydro-s-indacenes, **663**, 58
Ansa zirconocene
Dinuclear ansa zirconocene complexes containing a sandwich and a half-sandwich moiety as catalysts for the polymerization of ethylene, **658**, 259
Anti-aromatic
Synthesis and structure of a highly fluorinated 7-bora-7*H*-benzo[*de*]anthracene, **643-644**, 164
Antimony
Oxidation of tetraaryldistibanes: syntheses and crystal structures of diarylantimony oxides and peroxides, $(R_2Sb)_2O$, $(R_2Sb)_4O_6$ and $(R_2SbO)_4(O_2)_2$ (R = Ph, *o*-Tol, *p*-Tol), **648**, 209
Silicon-lead chalcogenides of the types $Me_4Si_2(E)_2PbPh_2$ and $Ph_2Pb(E)_2Si_2Me_2(E)_2PbPh_2$ (E = S, Se) and related compounds containing tin and antimony, **648**, 220
Syntheses and crystal structures of a covalent trialkylantimony hydroxo bromide and related trialkylantimony(V) halides, **648**, 33
Synthesis and structure of the novel mixed Sb/Se and Sb/Te containing iron carbonyl clusters $[Fe_3(\mu_3\text{-}Y)(\mu_3\text{-}SbMes)(CO)_9]$ (Y = Se, Te) and $[Fe_3(\mu_3,\eta^2{:}\eta^1\text{-}SeSbMes)(\mu_3\text{-}SbMes)(CO)_{10}]$, **658**, 204
Synthesis of Sb-chiral organoantimony compounds having intramolecular Sb···N interaction and their separation into optically pure compounds via *ortho*-palladated benzylamine complexes, **656**, 234
Synthesis, structure and reactivity of highly functionalized arsanyl- and stibanyl-diazomethanes, **643-644**, 81
Antimony selenium
Syntheses and structures of $(R_2Bi)_2E$ (E = S, Te) and *cyclo*-$(RSbSe)_2[W(CO)_5]_2$ [R = $CH(SiMe_3)_2$], **664**, 130
Apicophilicity
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), **643-644**, 441
Arduengo carbenes
Structural characterization of Group 4 transition metal halide bis-Arduengo carbene complexes MCl_4L_2: X-ray crystal structure analyses and DFT calculations, **663**, 192
Arene
Cationic ruthenium(II) complexes containing a chelating $\eta^1{:}\eta^6$-phosphinoarene ligand; $[RuCl(L)(PPh_2(CH_2)_3\text{-}\eta^6\text{-}C_6H_5)][PF_6]$ (L = $P(OPh)_3$, $P(OMe)_3$, PPh_3, PMe_3, NCMe, NC_5H_5), **659**, 1
Arene complex
Observation of non-chelated bis(pentamethylcyclopentadienyl)zirconium-alkyl–alkene complexes is thwarted by competitive arene or amine coordination or by β-hydride elimination, **642**, 120
Arene complexes
Chiral arene ruthenium complexes: Part 3. [Ruthenium(η^6-arene)(η^4-1,5-cyclooctadiene)] complexes with N or O donor functions in the arene side chain, **641**, 90
Organolanthanide chemistry in the gas phase, **647**, 216
Osmacycles containing the $\{(Ph_2PE)_2N\}^-$ ligand (E = S or Se): synthesis and crystal structures, **664**, 85
Arene coordination
Synthesis, characterization, and reactivity of half-sandwich Ru(II) complexes containing phosphine, arsine, stibine, and bismutine ligands, **649**, 55

The reaction of $Cp^*_2ZrMe_2$ with $[CPh_3][B(C_6F_5)_4]$: triphenylethane does *not* form η^n-arene complexes with $[Cp^*_2ZrMe]^+$, **654**, 221
Arenediethynyl
The first anionic arenediethynylgold(I) complexes, **663**, 40
Arenehydrazone–iron complex
Organodiiron(II)-complexes containing a long conjugated hydrazonato spacer. Synthesis, characterization, electrochemical and structural studies, **660**, 71
(η^6-Arene)-ruthenium(II) complexes
Neutral and cationic (η^6-arene)-ruthenium(II) complexes containing the iminophosphorane–phosphine ligand $Ph_2PCH_2P(=N\text{-}p\text{-}C_5F_4N)Ph_2$: influence of the arene ring in catalytic transfer hydrogenation of cyclohexanone, **663**, 32
Aromaticity
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, **643-644**, 105
Arsanides
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = 1,2-$(Ph_2P)_2C_2H_4$), **643-644**, 468
Arsenic
Reactivity of *cyclo*-$(PhX)_6$ (X = As, P) towards $[M_3L_2(CO)_{10}]$ (M = Ru, L = CO or NCMe; M = Fe, L = CO), **664**, 27
Synthesis, structure and reactivity of highly functionalized arsanyl- and stibanyl-diazomethanes, **643-644**, 81
Arsine
Ruthenium hydrides bearing $SbPh_3$ and $AsPh_3$ ligands: characterization of the bis(dihydrogen) complexes $[Cp^*Ru(H_2)_2(EPh_3)]^+$ ($Cp^* = C_5Me_5$; E = Sb, As), **663**, 151
Arsines
Synthesis, characterization, and reactivity of half-sandwich Ru(II) complexes containing phosphine, arsine, stibine, and bismutine ligands, **649**, 55
Arsinium anion
Synthesis, X-ray absorption spectroscopy and purification of the seleno-bis (*s*-glutathionyl) arsinium anion from selenide, arsenite and glutathione, **650**, 108
Arylation
Multiple arylation of carbonyl compounds via palladium catalysis, **653**, 161
Arylboronic acids
Palladium-catalyzed cross-coupling reactions of arylboronic acids and 2-I-*p*-carborane, **657**, 267
Aryl chlorides
Development of new palladium catalysts for the alkoxycarbonylation of aryl chlorides, **641**, 30
Aryl dithiocarboxylate
Reactions of cyclomanganated complexes with carbon disulfide: routes to η^2-aryldithiocarboxylate-$Mn(CO)_4$ complexes and to the trithiocarbonate complex $(\mu_3\text{-}CS_3)_2Mn_4(CO)_{16}$, **664**, 288
Arylferrocenylphenyl amines
Synthesis of ferrocenylphenyl derivatives including biphenylferrocenes, arylferrocenylphenyl ethers and arylferrocenylphenyl amines, **645**, 65
Arylferrocenylphenyl ethers
Synthesis of ferrocenylphenyl derivatives including biphenylferrocenes, arylferrocenylphenyl ethers and arylferrocenylphenyl amines, **645**, 65
Aryl halide
Discovery of the cross-coupling reaction between Grignard reagents and $C(sp^2)$ halides catalyzed by nickel–phosphine complexes, **653**, 23
Aryl halides
Cross-coupling reaction of organobismuth dialkoxides with aryl bromides and iodides catalyzed by $Pd(PPh_3)_4$, **659**, 117
Multiple arylation of carbonyl compounds via palladium catalysis, **653**, 161
Pd–benzothiazole carbene catalysed carbonylation of aryl halides in ionic liquids, **645**, 152
Aryllead
Detection of aryllead(IV) carboxylates and their solvent adducts by ESI-mass spectrometry, **645**, 176
Arylnitriles
Palladium-catalyzed formation of 3,5-diaryl-1,2,4-selenadiazoles from arylselenocarboxamide, **656**, 274
Aryloxide
New N- and O-donor ligand environments in organoscandium chemistry, **647**, 145
Symmetric and asymmetric samarium alkoxide derivatives of bridging sulfur biphenolate and binaphtholate ligands; synthetic, structural, and catalytic studies, **647**, 205
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, **643-644**, 331
Aryloxo
Bis(pentafluorophenyl)mercury—a versatile synthon in organo-, organooxo-, and organoamido-lanthanoid chemistry, **647**, 50
Aryloxy
The syntheses and structures of coordinatively unsaturated aryloxy-hydride complexes of molybdenum, $Mo(PMe_3)_4(OAr)H$: reversible C–H bond activation and comparison with their tungsten analogues, **652**, 37
Arylphospholes
Site-selective phosphorylation of arylphospholes through reaction with phosphorus tribromide, **643-644**, 32
Arylselenocarboxamides
Palladium-catalyzed formation of 3,5-diaryl-1,2,4-selenadiazoles from arylselenocarboxamide, **656**, 274
Aryl transfer
Four- five- and six-co-ordinated pentafluorophenylthallium(III) complexes. Crystal structures of $[Tl(C_6F_5)_3(OPPh_3)]$, $[Tl(C_6F_5)_2Cl(OPPh_3)]_2$ and $[Tl(C_6F_5)_2(OdppmO)_2][Tl(C_6F_5)_2Cl_2]$, **663**, 289
Assignment of ^{1}H-NMR signals
Structural studies of the $C_4H_8N_2Fe_2(CO)_6$ complex obtained by cyclization of acetaldazine in the presence of dodecacarbonyltriiron: investigations by X-ray diffraction and NMR of μ-1,2-(1,2-diaza-3-methylcyclopentane)diyl-bis(tricarbonyliron), **645**, 274
A(1,3) strain
Diastereoselective synthesis of C_2-symmetric hexacoordinated phosphate anions (HYPHATs) with predetermined chirality from 1,2-diaryl-ethane-1,2-diols, **643-644**, 392
Asymmetric
Oxidation of olefins by palladium(II). 18. Effect of reaction conditions, substrate structure and chiral ligand on the bimetallic palladium(II) catalyzed asymmetric chlorohydrin synthesis, **656**, 168
Asymmetric addition
Asymmetric addition of diethylzinc to aromatic aldehydes by chiral ferrocene-based catalysts, **649**, 258
Asymmetric ansa-complexes
Synthesis and electrochemistry of niobium complexes incorporating asymmetrically substituted *ansa*-ligands, **655**, 63
Asymmetric catalysis
'Diopium', a chiral phosphoniophosphine derived from Kagan's diop. Rhodium complexes and reducing catalytic properties, **654**, 180
Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, **643-644**, 424
Enantioselective synthesis of platinum group metal complexes with

the chiral PCP pincer ligand *R,R*-{C_6H_4-2,6-(CH_2P*PhBu^t)$_2$}. The crystal structure of *R,R*-PdCl{C_6H_3-2,6-(CH_2P*PhBu^t)$_2$}, **654**, 44
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, **643-644**, 98
Asymmetric CH oxidation
Biocatalytic synthesis of optically active oxyfunctionalized building blocks with enzymes, chemoenzymes and microorganisms, **661**, 17
Asymmetric imidodiphosphinato ligands
Solution and solid state structural investigations of organotin(IV) compounds containing asymmetric imidodiphosphinato ligands. X-ray structures of R′$_2$Sn[($OPMe_2$)($OPPh_2$)N]$_2$ (R = Me, Me, Bu^n, Ph), **642**, 71
Asymmetric induction
Diastereoselective synthesis of C_2-symmetric hexacoordinated phosphate anions (HYPHATs) with predetermined chirality from 1,2-diaryl-ethane-1,2-diols, **643-644**, 392
Asymmetric Michael reaction
Enantioselective synthesis of phosphinyl peptidomimetics via an asymmetric Michael reaction of phosphinic acids with acrylate derivatives, **646**, 212
Asymmetric monoacylation
Symmetric and asymmetric samarium alkoxide derivatives of bridging sulfur biphenolate and binaphtholate ligands; synthetic, structural, and catalytic studies, **647**, 205
Asymmetric synthesis
Asymmetric hydrogenation of 1-phenylethenylboronic acid and esters for the synthesis of chiral organoboron compounds, **642**, 145
Chiral boronates—versatile reagents in asymmetric synthesis, **657**, 136
Chlorotrimethylsilane-mediated Michael addition reactions of chiral benzylic anions derived from η^6-chromiumtricarbonyl complexes, **658**, 21
β-Ferrocenyl-β-amino alcohols: a new class of central chiral ferrocene derivatives, **642**, 212
4-Ferrocenyl-1,3-oxazoline derivatives as ligands for catalytic asymmetric allylation reactions, **660**, 62
Reactivity of the lithium anion of the (*S,S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, **643-644**, 130
The directed synthesis of axially chiral ligands, reagents, catalysts, and natural products through the 'lactone methodology', **661**, 49
ATP
Amplification upon polymerization of the electrochemical anion sensing properties of an amidoferrocene monoreceptor molecule, **656**, 116
Atropisomers
The lactone concept—a novel approach to the metal-assisted atroposelective construction of axially chiral biaryl systems, **661**, 31
Aurophilicity
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, **643-644**, 313
Axial chirality
Synthesis and X-ray structures of (biphenoxide)Ti species: four and five coordinate complexes that crystallize as mixtures of diastereomers, **663**, 70
The directed synthesis of axially chiral ligands, reagents, catalysts, and natural products through the 'lactone methodology', **661**, 49
The lactone concept—a novel approach to the metal-assisted atroposelective construction of axially chiral biaryl systems, **661**, 31
Axially symmetric
8-Sila-4-stanna-*s*-tetrahydroindacenes as synthons for Me_2Si-bridged zirconocenes: formation from biscyclopentadienyl silanes by reaction with aminostannanes, **660**, 85
Azaboretidine
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)iminomethanes via possible generation of (amino)(boryl)carbene species, **643-644**, 508
Azanonaborane
Azanonaborane-pyridine derivatives [(R′C_5H_4N)B_8H_{11}NHR″]: synthesis, structure and some molecular-orbital calculations, **657**, 205
Azaphospha heterocycle
Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, **643-644**, 4
Azaphosphirane
Structural properties of azaphosphirane and its $W(CO)_5$ complex. A density functional study, **643-644**, 369
Azaphosphirene complexes
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, **643-644**, 253
Azayldiide
Lithium phosphonium azayldiides $R_3P{=}NLi$. Applications in organic synthesis and coordination chemistry, **646**, 94
Azides
A comparative study on structures and theoretical models of Rh azido complexes, **654**, 170
Azines
Structural studies of the $C_4H_8N_2Fe_2(CO)_6$ complex obtained by cyclization of acetaldazine in the presence of dodecacarbonyltriiron: investigations by X-ray diffraction and NMR of μ-1,2-(1,2-diaza-3-methylcyclopentane)diyl-bis(tricarbonyliron), **645**, 274
Aziridines
Allylboration of functionalized isoquinolines, **657**, 123
Synthesis of a new iron Lewis acid catalyst possessing a chelating cyclopentadienyldiphenylphosphinite ligand, (η^5:η^1-$C_5H_4CH(Ph)OPPh_2$), **654**, 202

Band assignment
A new method for assigning the C–O stretching bands in *cis*-disubstituted octahedral metal carbonyl complexes, **660**, 116
Barium
Synthesis and characterization of monomeric Ba and Sr complexes with malonate and Lewis base ligands, **648**, 214
Bent metallocenes
The bent metallocene geometries of potassium polyalkyl cyclopentadienyl THF solvates: monosolvated [(THF)K(μ-C_5Me_5)]$_n$, disolvated [(THF)$_2$K(μ-C_5Me_5)]$_n$ and the tethered olefin complex [(THF)K(μ-$C_5Me_4SiMe_2CH_2CH{=}CH_2$)]$_n$, **649**, 252
Bent titanocenes
Synthesis and crystal structures of thermally stable titanocenes, **663**, 134
Benzannulation
Reactions of complex ligands: Part 94. Chromium-templated angular versus linear benzannulation of dibenzofuran and haptotropic metal migration in tetracyclic fused arenes, **641**, 185
Benzene
Highly selective synthesis of biphenyl by the $Pd(OAc)_2$/HPA/O_2/AcOH catalyst system, **664**, 59
1,4-Benzenedicuprates
One pot stereoselective synthesis of chiral α,ω-diynes from bromoallenes and organobis(heterocuprates), **648**, 109
Benzimidazole ligands
Dimethylplatinum(II) and tetramethylplatinum(IV) complexes of 1-

methyl-(2-alkylthiomethyl)-1*H*-benzimidazoles: experimental and DFT-calculated structures and NMR spectra, **655**, 218
Benzoic acids
Development of new palladium catalysts for the alkoxycarbonylation of aryl chlorides, **641**, 30
Benzonaphthofurans
Reactions of complex ligands: Part 94. Chromium-templated angular versus linear benzannulation of dibenzofuran and haptotropic metal migration in tetracyclic fused arenes, **641**, 185
Benzophospholides
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, **643-644**, 181
Benzotriazole
New benzotriazole derivatives as multifunctional ligands, **658**, 251
Benzylamine
Reactivity of Me_3M (M = Al, Ga, In) with benzylamine to form the dimers, $[Me_2MN(H)CH_2Ph]_2$, and the hexamers, $[MeAlNCH_2Ph]_6$ and $[MeGaNCH_2Ph]_6$: molecular structures of *trans*-$[Me_2MN(H)CH_2Ph]_2$ and $[MeAlNCH_2Ph]_6$, **649**, 78
Benzylborate anion
Solution structure and decomposition pathway of zwitterionic zirconium (IV) benzyl complexes, **658**, 1
Benzyl glycidyl ether
Selective cleavage of the linear ether bond in benzyl glycidyl ether and triphenylmethyl glycidyl ether by potassium alkalide as two-electron-transfer reagent, **660**, 6
Benzyltribromogermane
Synthesis, molecular structure and biological activity of bromobenzylgermatranes, **659**, 165
Benzyne
CH and PC bond activations of PMe_2Ph ligands by an octahedral Ru_6 cluster, **651**, 124
Pyrolysis of $[Ru_3(CO)_{10}(dppe)]$: activation of C–H and P–Ph bonds. The crystal structure and dynamical behavior of $[Ru_4(CO)_9(\mu\text{-}CO)\{\mu_4\text{-}\eta^2\text{-}PCH_2CH_2P(C_6H_5)_2\}(\mu_4\text{-}\eta^4\text{-}C_6H_4)]$, **660**, 153
Berry pseudorotation
Syntheses, structure, and Berry pseudorotation of ruthenium-, iron-, and cobalt-phosphorane complexes, **646**, 204
B-H-M agostic bond
Synthesis and characterisation of the *exo-nido* molybdacarborane complex $Mo(\eta\text{-}C_3H_5)(CO)_2(7,8\text{-}\mu\text{-}SCH_2CH_2S\text{-}7,8\text{-}nido\text{-}C_2B_9H_{10})$. Strong B–H–Mo 3-centre bonding, **663**, 221
Biaryl
Scope and limitation of the nickel-catalyzed coupling reaction between lithium borates and mesylates, **653**, 91
Biaryl axis
The directed synthesis of axially chiral ligands, reagents, catalysts, and natural products through the 'lactone methodology', **661**, 49
Biaryl ligands
The directed synthesis of axially chiral ligands, reagents, catalysts, and natural products through the 'lactone methodology', **661**, 49
Biaryls
Catalytic asymmetric cross-coupling, **653**, 41
Chiral boronates—versatile reagents in asymmetric synthesis, **657**, 136
The directed *ortho* metalation—cross coupling symbiosis. Regioselective methodologies for biaryls and heterobiaryls. Deployment in aromatic and heteroaromatic natural product synthesis, **653**, 150
The lactone concept—a novel approach to the metal-assisted atroposelective construction of axially chiral biaryl systems, **661**, 31
Bicyclic phosphazane
$P(MeNMCH_2CH_2)_3N$: an effective catalyst for trimethylsilycyanation of aldehydes and ketones, **646**, 161
Bicyclo[3.2.0]hept-1(7) ene
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, **643-644**, 324
Bidentate chiral ligand
Synthesis of a novel copper(II) complex and its crystal structure, **650**, 274
Bidentate ligands
Theoretical studies on the β-hydrogen elimination reactions of palladium and platinum alkoxide complexes containing bidentate ligands, **662**, 120
Bidentate P–O ligands
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, **643-644**, 237
Biferrocenium
Effects of counterions on intramolecular electron transfer in 1′,1‴-dinaphthylmethylbiferrocenium cation: structural, Mössbauer and EPR characteristics, **659**, 125
Bimetallic
A new class of linked-bis(*N*,*N*′-dialkylamidinate) ligand: applications in the synthesis of bimetallic aluminium complexes, **662**, 178
Bimetallic complex
Organodiiron(II)-complexes containing a long conjugated hydrazonato spacer. Synthesis, characterization, electrochemical and structural studies, **660**, 71
Bimetallic complexes
Combining organometallic and Werner-type coordination sites in highly preorganized heterobimetallic systems, **641**, 113
Bimetallic nickel complexes
Bimetallic nickel complexes with bridging dithiolato Schiff base ligands: synthesis, mass spectral characterisation and electrochemistry, **656**, 262
Binaphthol
Defining effective chiral binding sites at lanthanides—highly enantioselective reagents and catalysts from binaphtholate and pybox ligands, **647**, 151
1,1′-Bi-2-naphtholate
Synthesis and structure of a chromium(III) complex coordinated by 1,1′-Bi-2-naphtholate ligands and its catalytic activity for ethylene polymerization, **648**, 226
Binaphtholate ancillary ligands
Symmetric and asymmetric samarium alkoxide derivatives of bridging sulfur biphenolate and binaphtholate ligands; synthetic, structural, and catalytic studies, **647**, 205
Binuclear
Salen-supported dinuclear and trinuclear boron compounds, **654**, 36
Binuclear complex
Synthesis and redox property of the binuclear Pt(II) complexes bridged by thieno[3,2-*b*]thiophenes, **654**, 56
Binuclear ruthenocene derivatives
The synthesis and redox behaviors of binuclear ruthenocene derivatives bridged by an aromatic moiety, **655**, 23
Biocatalysts
Biocatalytic synthesis of optically active oxyfunctionalized building blocks with enzymes, chemoenzymes and microorganisms, **661**, 17
Bioconjugate
Synthesis and electrochemistry of 5-ferrocene-glucosamide, 5-ferrocene-glucosamide phosphate and 5-ferrocene-amido-5-adenosine in aqueous solution, **648**, 81
Bioorganometallic
The first titanocenyl dichloride moiety vectorised by a selective

estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, **643-644**, 350

Biphenol

Synthesis and X-ray structures of (biphenoxide)Ti species: four and five coordinate complexes that crystallize as mixtures of diastereomers, **663**, 70

Biphenyl

Highly selective synthesis of biphenyl by the $Pd(OAc)_2$/HPA/O_2/AcOH catalyst system, **664**, 59

Biphenylene

Chromium tricarbonyl complexes with biphenylene as η^6 ligand: synthesis, structure, dynamic behaviour in solid state and thermal η^6,η^6-haptotropic rearrangements. Experimental (NMR) and theoretical (DFT) studies, **656**, 27

Biphenylferrocenes

Synthesis of ferrocenylphenyl derivatives including biphenylferrocenes, arylferrocenylphenyl ethers and arylferrocenylphenyl amines, **645**, 65

Biphenylyl substituents

Water soluble phosphines: Part XV. Syntheses of multiply functionalized and chiral phosphine ligands by Pd-catalyzed P–C and C–C coupling reactions, **645**, 14

Bipyridine

Ruthenium complexes with 2,2′-, 2,4′- and 4,4′-bipyridine ligands: The role of bipyridine coordination modes and halide ligands, **655**, 31

2,2′-Bipyridine

Reactions of the cationic diruthenium carbonyl complex $[Ru_2(\mu\text{-dppm})_2(CO)_4(\mu,\eta^2\text{-}O_2CMe)]^+$ with bidentate ligands; intramolecularly assisted stereospecific synthesis via the second-sphere face-to-face $\pi-\pi$ stacking interactions, **650**, 268

Bipyridyl

Carbonyl derivatives of iron(0) from the reaction of $FeR_2(bipy)_2$ (R = Me, Et) with carbon monoxide, **662**, 137

Bis-alkynyl compounds

Synthesis and characterization of *trans*-phenylethynylalkynyl adducts on a tetraanilinopyridinato-diruthenium(III) core, **655**, 239

Bisarene complexes

Rydberg spectra of bis(η^6-benzene)chromium derivatives: Gas-phase photoabsorption study of bis(η^6-1,2,4-trimethylbenzene)chromium and bis(η^6-1,2,4,5-tetramethylbenzene)chromium, **649**, 100

Bis(2,2′-bipyridines)

Preparation, properties, and reactions of metal-containing heterocycles: Part CVIII. A novel generation of rigid, nanoscaled 1,1′-ferrocenediyl-bridged bis(pyridine), bis(bipyridine), and bis(phenanthroline) ligands, **660**, 78

Bis(1,2-dicarbollido)-3-cobalt(1-)ate ion

Syntheses of the $B_{(8)}$-hydroxy- and $B_{(8,8')}$-dihydroxy-derivatives of the bis(1,2-dicarbollido)-3-cobalt(1-)ate ion by its reductive acetoxylation and hydroxylation: molecular structure of $[8,8'\text{-}\mu\text{-}CH_3C(O)_2<(1,2\text{-}C_2B_9H_{10})_2\text{-}3\text{-}Co]^0$ zwitterion determined by X-ray diffraction analysis, **649**, 181

bis(diPhenylacetylene)

Synthesis, reactivity and structures of diethyldithiophosphate molybdenum complexes: crystal structures of $[Mo\{\eta^2\text{-}S_2P(OEt_2)\}_2(PhC{\equiv}CPh)_2]$ and $[Mo(\eta^3\text{-}C_3H_5)\{\eta^1\text{-}S_2P(OEt_2)\}(Phen)(CO)_2]$, **658**, 191

Bis(2-diphenylphosphinoethyl)methylamine

Synthesis of cobalt(II) and iron(II) complexes with the ligand bis(2-diphenylphosphinoethyl)methylamine and their catalytic action on ethylene oligomerization. X-ray crystal structure of $[CoCl_2\{CH_3N(CH_2CH_2PPh_2)_2\}]$, **645**, 127

Bis(diphenylphosphinomethyl)amine

Tricarbonylrhenium(I) complexes of phosphine-derivatized amines, amino acids and a model peptide: structures, solution behavior and cytotoxicity, **650**, 123

1,3-Bisfunctionalised ferrocene

Synthesis and reactivity of Group 14 substituted amino-functionalised cyclopentadienyl compounds, **656**, 49

Bis(indenyl)

Bis(2-*N*,*N*′-methylpiperazinoindenyl)zirconium dichloride. Crystal structure of bis(2-*N*,*N*′-methylpiperazinoindenyl)$ZrCl_2$, **659**, 64

Bis(η^5-indenyl)zirconium complexes

Bis(η^5-cyclopentadienyl)- and bis(η^5-indenyl)metallacycles of titanium and zirconium from methylenecyclopropanes by oxidative coupling, **656**, 288

Bismuth

Reactions of cyclopentadienylmolybdenum compounds with bismuth alkoxides, **641**, 9

Syntheses and structures of $(R_2Bi)_2E$ (E = S, Te) and *cyclo*-$(RSbSe)_2[W(CO)_5]_2$ [$R = CH(SiMe_3)_2$], **664**, 130

Bismutines

Synthesis, characterization, and reactivity of half-sandwich Ru(II) complexes containing phosphine, arsine, stibine, and bismutine ligands, **649**, 55

Bis(oligosilanyl)chalcogenides

Bis(oligosilanyl)chalcogenides $[(Me_3Si)_xMe_{3-x}Si]_2E$, alkalimetal oligosilanylchalcogenolates $(Me_3Si)_xMe_{3-x}Si{-}EM^I$ and oligosilanylchalcogenols $(Me_3Si)_xMe_{3-x}Si{-}EH$ (E = S, Se, Te): Syntheses and NMR study, **660**, 36

Bis-oxazoline-ruthenium complexes

Synthesis of bis-oxazoline-ruthenium(II)-arene complexes. Combined catalytic isomerisation and Claisen rearrangement of bisallyl ether, **662**, 63

Bisoxazolines

Cp*rhodium and iridium complexes with bisoxazolines: synthesis, fluxionality and applications as asymmetric catalysts for Diels–Alder reactions, **662**, 43

Bis(pentafluorophenyl)mercury

Bis(pentafluorophenyl)mercury—a versatile synthon in organo-, organooxo-, and organoamido-lanthanoid chemistry, **647**, 50

Bis(1,10-phenanthrolines)

Preparation, properties, and reactions of metal-containing heterocycles: Part CVIII. A novel generation of rigid, nanoscaled 1,1′-ferrocenediyl-bridged bis(pyridine), bis(bipyridine), and bis(phenanthroline) ligands, **660**, 78

Bisphosphine

Synthesis of 1,2-bis[(diorgano)phosphino]ethanes via Michaelis–Arbuzov type rearrangements, **646**, 230

Bis(phosphinimino)methanides

Cyclopentadienyl complexes of yttrium and the lanthanides with bis(phosphinimino)methanides, **647**, 123

Bisphosphonates

Michael addition of Grignard reagents to tetraethyl ethenylidenebisphosphonate, **650**, 77

Bis(pyrazolyl)

New studies on the apparent allyl rotation in scorpion-like palladium complexes. The influence of non-directly bonded groups. X-ray molecular structures of $[Pd(\eta^3\text{-}2\text{-}Me\text{-}C_3H_4)L]TfO$, L = bpzmArOMe and bpz*mCy, **650**, 210

Bis(pyrazol-1-yl)methane

Synthesis and crystal structures of Group 6 metal carbonyl complexes containing S-rich bis(pyrazol-1-yl)methane ligands, **649**, 152

Synthesis of bis(pyrazol-1-yl)methanes with organogermyl and organosilyl groups on the methine carbon and their reaction with $W(CO)_5(THF)$. X-ray crystal structures of $Ph_3GeCHPz_2W(CO)_4$ and $Me_3SiCHPz_2W(CO)_4$ (Pz = 3,5-dimethylpyrazole), **658**, 198

Bis(pyridines)
Preparation, properties, and reactions of metal-containing heterocycles: Part CVIII. A novel generation of rigid, nanoscaled 1,1′-ferrocenediyl-bridged bis(pyridine), bis(bipyridine), and bis(phenanthroline) ligands, **660**, 78
Bis(silyl)alkene
Hydrosilylation of alkynylsilanes utilizing organolanthanide and Group 3 metallocene complexes, **647**, 225
Bis(sulfinylamido)
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Bis(tricarbonyliron)
Structural studies of the $C_4H_8N_2Fe_2(CO)_6$ complex obtained by cyclization of acetaldazine in the presence of dodecacarbonyltriiron: investigations by X-ray diffraction and NMR of μ-1,2-(1,2-diaza-3-methylcyclopentane)diyl-bis(tricarbonyliron), **645**, 274
1,3-Bistriflato-5,7-dimethyl-1,3,5,7-tetrasilaadamantane
1-Triflato-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane and 1,3-bistriflato-5,7-dimethyl-1,3,5,7-tetrasilaadamantane; synthesis, complexation study and X-ray structure of 1-hydroxy-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane, **658**, 141
Bis(trifluoromethane)sulfonimide
Bis(trifluoromethane)sulfonimide initiated ring-opening polymerization of octamethylcyclotetrasiloxane, **646**, 171
Bis(trimethylsilyl)ethyne complex
Synthesis and crystal structures of μ-1,3-bis(η^5-tetramethylcyclopentadienyl)-1,1,3,3-tetramethyldisiloxane)[η^2-bis(trimethylsilyl)ethyne]titanium(II) and a doubly tucked-in product of its thermolysis, **658**, 235
Bis(trimethylsilyl)ethyne complexes
Syntheses and properties of some *exo*,*exo*-bis(isodicyclopentadienyl)titanium low-valent complexes, **656**, 81
α,ω-Bis(trimethylsilyl)-polydimethylsiloxanes
Bis(trifluoromethane)sulfonimide initiated ring-opening polymerization of octamethylcyclotetrasiloxane, **646**, 171
BN fibers
Pyrolysis of poly[2,4,6-tri(methylamino)borazine] and its conversion into BN fibers, **657**, 91
Bond activation
Carbon–fluorine bond activation of perfluorinated arenes with $Cp^*_2ZrH_2$, **658**, 132
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = 1,2-$(Ph_2P)_2C_2H_4$), **643-644**, 468
Bond alternation
Aromaticity of annulated benzene, pyridine and phosphabenzene, **643-644**, 39
Bond cleavage
One-electron oxidation of metal enolates and metal phenolates, **661**, 169
Bond-critical point
Modulation of the C–C distance in disubstituted 1,2-R_2-*o*-carboranes. Crystal structure of *closo* 1,2-$(SPh)_2$-1,2-$C_2B_{10}H_{10}$, **657**, 232
Bond dissociation energy
Density functional investigation of incorporation of functional additives to neutral salicylaldiminato Ni(II) polymerization catalyst, **654**, 132
Bond dissociation enthalpy
Electrochemistry of $Ru_2Cp'_2(CO)_4$ and $Ru_2Cp_2(CO)_3(PMe_3)$ and the estimation of $Ru_2(\mu\text{-}H)$ bond dissociation enthalpies, **656**, 181
On the transferability of Ir–I bond enthalpies between [Ir(μ-S^{t}Bu)$(I)_2(CO)_2]_2$ and *trans*-[Ir(X)$(I)_2(CO)(PPh_3)_2$] (X = F, Cl, Br, I) complexes, **662**, 105
η^1-π-bonding
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile, isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, **643-644**, 214
Bonding analysis
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, **643-644**, 105
Bonding concepts
Coordinated olefins, $H_2C{=}CHR$, and phosphanes, PH_2R: a theoretical study of the R substituent effect, **643-644**, 285
Bond modulation, *closo*-carboranes
Modulation of the C–C distance in disubstituted 1,2-R_2-*o*-carboranes. Crystal structure of *closo* 1,2-$(SPh)_2$-1,2-$C_2B_{10}H_{10}$, **657**, 232
Borane
Synthesis of dendrimers with phosphine end groups at each generation, **643-644**, 112
Borane cluster compounds
The use of Kitaigorodskii's *Aufbau* principle in the solid-state study of crystalline borane compounds. A preliminary account, **657**, 20
Borane complexes
Fluxional behavior of chromium and tungsten complexes of monodentate bis(trimethylphosphine)diborane(4), $[M(CO)_5(\eta^1\text{-}B_2H_4{\cdot}2PMe_3)]$ (M = Cr, W): A model case for alkane–metal complexes, **659**, 102
3-Borane-imidazoles
Metal complexes of anionic 3-borane-1-alkylimidazol-2-ylidene derivatives, **641**, 195
Boranes
Allylboration of functionalized isoquinolines, **657**, 123
Chemistry on a metallathiaborane cluster Part 4: reactions of 11-vertex rhodathiaboranes with bidentate phosphines and their subsequent rearrangements, **657**, 40
Boratabenzene
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136
Boratabenzene ligands
Zirconocene compounds derived from boratastilbene, 4-boratastyrylstilbene, and 1,4-bis(boratastyryl)benzene and their reactivities to the ethylene polymerization, **642**, 275
Borate
Scope and limitation of the nickel-catalyzed coupling reaction between lithium borates and mesylates, **653**, 91
borazine
Synthesis and structure of 2,4,6-tris[tris(dimethylamino)silylamino]borazine: $\{[(CH_3)_2N]_3SiNH\}_3B_3N_3H_3$, **657**, 71
Borneol
Synthesis and X-ray structures of (biphenoxide)Ti species: four and five coordinate complexes that crystallize as mixtures of diastereomers, **663**, 70
Borohydride
A neutron diffraction study of $Cp_2Ti\{(\mu\text{-}H)_2BC_8H_{14}\}$, **654**, 216
Synthesis and structure of monomeric and solvent-free $LPrX_2$ compounds supported by a new β-diketiminato ligand [L = $Et_2NCH_2CH_2NC(Me)CHC(Me)NCH_2CH_2NEt_2$, X = Cl, Br, BH_4], **643-644**, 47
The first mixed cyclooctatetraenyl-phospholyl metal complexes. Crystal structure of $[U(\eta\text{-}C_8H_8)(\eta\text{-}C_4Me_4P)(BH_4)(OC_4H_8)]$, **643-644**, 209
Boron
Alkylderivatives of Stanna-*closo*-dodecaborate, **664**, 116
A new approach to photophysical properties control of main group element π-electron compounds based on the coordination number change, **652**, 3
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136

Hexa(1-alkynyl)disilanes. Synthesis, structure and 1,1-ethylboration, **656**, 97
Porous boron nitride supports obtained from molecular precursors. Influence of the precursor formulation and of the thermal treatment on the properties of the BN ceramic, **657**, 98
Rhodium(I) catalysed diboration of (*E*)-styrylboronate esters: molecular structures of (*E*)-*p*-MeO–C_6H_4–CH=CH–B(1,2-$O_2C_6H_4$) and *p*-MeO–C_6H_4–$CH_2C\{B(1,2\text{-}O_2C_6H_4)\}_3$, **652**, 77
Salen-supported dinuclear and trinuclear boron compounds, **654**, 36
Synthesis and reactivity of transition metal complexes containing halogenated boryl ligands, **649**, 9
Synthesis and structure of a highly fluorinated 7-bora-7*H*-benzo[*de*]anthracene, **643-644**, 164
Very strong anionic homoaromaticity in (*deloc*-1,3,4)-1-sila-3,4-diboracyclopentane-1-ides, the importance of the energy of the reference system for homoaromatic stabilization energies, **646**, 262

Boron and compounds
Asymmetric hydrogenation of 1-phenylethenylboronic acid and esters for the synthesis of chiral organoboron compounds, **642**, 145

Boronates
Chiral boronates—versatile reagents in asymmetric synthesis, **657**, 136
X-ray analysis and structural characterization of 2-phenyl-6-aza-1,3-dioxa-2-borabenzocyclononenones, **657**, 194

Boron cluster compounds
Macropolyhedral boron-containing cluster chemistry: Models for intermediates en route to globular and discoidal megaloborane assemblies. Structures of [*nido*-$B_{10}H_{12}$(*nido*-B_5H_8)$_2$] and [($CH_2CH_2C_5H_4N$)-*arachno*-$B_{10}H_{10}$(NC_5H_4-*closo*-$C_2B_{10}H_{10}$)] as determined by synchrotron X-ray diffraction analysis, **657**, 256

Boron clusters
Recent developments in the chemistry of the nine-vertex monocarbaboranes, **657**, 3

Boron compounds
X-ray analysis and structural characterization of 2-phenyl-6-aza-1,3-dioxa-2-borabenzocyclononenones, **657**, 194

Boronic acid
Synthesis, characterisation and molecular structure of [Rh(COE)$_2$(acac)] (COE = cyclooctene, η^2-C_8H_{14}), an important starting material for the preparation of rhodium catalyst precursors, **649**, 199

Boronic acids
Cross-coupling reactions with boronic acids in water catalysed by oxime-derived palladacycles, **663**, 46
Syntheses with organoboranes. XIII. Synthesis of ω-(4-bromophenyl)alkanoic acids and their borylation, **657**, 129

Boron neutron capture therapy
Synthesis of functional derivatives of the [3,3′-Co(1,2-$C_2B_9H_{11}$)$_2$]$^-$ anion, **649**, 1

Boron nitride
Boron nitride thin fibres obtained from a new copolymer borazine–tri(methylamino)borazine precursor, **657**, 107
High resolution solid state NMR investigation of various boron nitride preceramic polymers, **657**, 75

Boron–nitrogen backbone
Stepwise assembly and structural characterization of oligonuclear ferrocene aggregates with boron–nitrogen backbone, **664**, 94

Boron tribromide
Intramolecular cyclization of benzyl-substituted cyclopentadienyl titanium dichlorides promoted by boron tribromide, **645**, 59

Boryl
Synthesis and reactivity of transition metal complexes containing halogenated boryl ligands, **649**, 9

B-phenylation
Polyhedral monocarbaborane chemistry: The C,B-*para*-diphenyl monocarbadodecaborane anion [1,12-Ph_2-*closo*-1-$CB_{11}H_{10}$]$^-$, **657**, 176

Bridged binuclear
Dimeric cyclopalladated azobenzenes: structural differences between 2-hydroxypyridine and 2-mercaptopyridine bridged complexes, **650**, 202

Bridged complexes
Synthetic, spectral and structural aspects of some Rh(III) pentamethylcyclopentadiene complexes containing *N*,*N*′-donor bridging ligands, **658**, 43

Bridged cyclopentadienyls
Two nickelocenes and ferrocene in a rigid *cis*/*trans* chain, **658**, 266

Bridged ferrocenes
Syntheses and structural characterization of some mono- and di-*p*-nitrophenyl[3]ferrocenophanes: X-ray structure of [3]ferrocenophane, 3-*p*-nitrophenyl[3]ferrocenophane, and 3,4′-bis-(*p*-nitrophenyl)[3]ferrocenophane; DFT calculations on ferrocene derivatives, **649**, 161

Bridging
Dithiocarbamate derivatives of μ-thiocarbyne complexes: synthesis and X-ray molecular structure of [Fe_2(μ-CS)(μ-CSMe)(μ-S_2CNMe_2)Cp_2], **659**, 15

Bridging carbyne complexes
Unusual reactions of cationic bridging carbyne complexes of dimethylsilane-bridged bis(η^5-cyclopentadienyl)diiron tricarbonyl with carbonylmetal anions, **658**, 214

Bridging hydride
Electrochemistry of $Ru_2Cp_2(CO)_4$ and $Ru_2Cp_2(CO)_3(PMe_3)$ and the estimation of Ru_2(μ-H) bond dissociation enthalpies, **656**, 181

Bridging ligand
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, **643-644**, 494
Convenient access to an alkenyl(biscarbene)-bridged heterobinuclear (Ru–W) complex. X-ray structure of [(η^6-$C_6Me_4H_2$)Ru=C(OMe)(CH=CHC_6H_4CH=CH–CO_2Me)(Cl)(Me)(Cl)(PMe_3)][PF_6], **643-644**, 498
Synthesis and spectroscopic characterisation of compounds with formula [{Fe_2(SPh)$_2$(CO)$_5$}$Ph_2P(CH_2)_nPPh_2${Fe(CO)$_4$}] and [{Fe_2(SPh)$_2$(CO)$_5$}$_2Ph_2P(CH_2)_nPPh_2$] (*n* = 3, 4 and 6), **642**, 40

Bridging ligands
Combining organometallic and Werner-type coordination sites in highly preorganized heterobimetallic systems, **641**, 113
Stable mononuclear and binuclear ruthenium(II) arene complexes with multiple N-donor poly-pyridyl ligands: synthesis, spectroscopic and structural characterization. Single crystal X-ray structure of [(η^6-$C_{10}H_{14}$)RuCl(bppz)]BF_4, **642**, 48

Bridging nitrogen-containing ligands
Synthesis of dimetallic μ-alkylideneamido zirconocene dications by a thermodynamically favorable lithium chloride elimination pathway, **643-644**, 61

Bromide
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80

Bromination
Pd(II) bromide complexes of 1,2-bis(diphenylphosphino)-1,2-dicarba-*closo*-dodecaborane. Crystal structures of [$PdBr_2$(1,2-(PPh_2)$_2$-1,2-$C_2B_{10}H_{10}$)]·CH_2Cl_2, [$PdBr_{1.133}Cl_{0.867}$(1,2-(PPh_2)$_2$-1,2-$C_2B_{10}H_{10}$)]·CH_2Cl_2 and [$PdBrCl_{0.541}Me_{0.459}$(1,2-(PPh_2)$_2$-1,2-$C_2B_{10}H_{10}$)]·$CHCl_3$, **657**, 187
Synthesis of 2H-1,2-oxaphosphorin 2-oxides, **646**, 153

Bromine
Syntheses and crystal structures of a covalent trialkylantimony hydroxo bromide and related trialkylantimony(V) halides, **648**, 33

Bromoallenes
One pot stereoselective synthesis of chiral α,ω-diynes from bromoallenes and organobis(heterocuprates), **648**, 109
Bromobenzyltribromogermane
Synthesis, molecular structure and biological activity of bromobenzylgermatranes, **659**, 165
Bromoenyne
Studies on stereoselective Sonogashira coupling of 1,1-dibromo-1-alkene, **653**, 141
Bromopentacarbonylmanganese
A mixed-valence dimanganese complex synthesized from the $[Ph_2P(O)NP(O)Ph_2]^-$ anion with $[BrMn(CO)_5]$, **645**, 54
Brook rearrangement
Synthesis and structure of the first pentacoordinate thiasiliranides, **643-644**, 504
B-substitution
Polyhedral monocarbaborane chemistry: The C,B-*para*-diphenyl monocarbadodecaborane anion $[1,12\text{-}Ph_2\text{-}closo\text{-}1\text{-}CB_{11}H_{10}]^-$, **657**, 176
Bulky cyclopentadienyl ligands
Synthesis of new half sandwich tetrachloro derivatives of molybdenum(V) and tungsten(V). X-ray structures of $(C_5HPr^i_4)W(CO)_3(CH_3)$ and $(C_5Et_5)WCl_4$, **654**, 109
Bulky groups
Unusual structures of lithium terphenyl derivatives, **643-644**, 461
Bulky ligands
Attachment to manganese or cobalt of a bulky tri(organosilyl)methyl ligand containing an NMe_2 or an OMe donor group, **649**, 121
Sodium and potassium derivatives of diphenyl(trimethylsilyl)methane, **664**, 182
Bulky phosphines
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, **643-644**, 68
Butadiene
Theoretical study of the bonding capabilities of 1,4-diaza-1,3-butadiene and *cis*-1,3-butadiene ligands in cyclopentadienyl tantalum(V) complexes, **655**, 16
Butadienyl
Synthesis and reactivity of organochalogen ester substituted η^3-butadienyl complexes of Mo(II): crystal structure of $[MoCl(CO)_2(\eta^3\text{-}CH_2C(COSePh)C{=}CH_2)(1,10\text{-phenanthroline})]\cdot 0.5\ CH_2Cl_2$, **664**, 277
1,4-Butanedicuprates
One pot stereoselective synthesis of chiral α,ω-diynes from bromoallenes and organobis(heterocuprates), **648**, 109
Butane-1,3-diol
Hydroxyferrocene as a prochiral analog of phenols: cyclopalladation of a mixed phosphite ester of hydroxyferrocene, **642**, 236
3-Butenylcyclopentadiene
Synthesis, characterization and application of organolanthanide complexes $(CH_2{=}CHCH_2CH_2C_5H_4)_2Ln{-}Cl\cdot 2THF$ (Ln = Sm, Y, Dy, Er) as methyl methacrylate (MMA) polymerization catalysts, **647**, 105
2-Butyne
Nitrile exchange reactions of $[WI(CO)(NCMe)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$; X-ray crystal structures of $[WI(CO)(L)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$ {L = NC^iPr, NC^tBu, $NCCH_2Ph$, $1,2\text{-}C_6H_4(NCCH_2)_2$}, **664**, 37

Caesium
Synthesis of heavier alkali metal phospholides. Crystal structure of caesium 2,3,4,5-tetramethylphospholide, an ionic solid, **642**, 208
Cage bonding
Heteroboranes of the p-block elements, **646**, 21
Cage compound
Reactions of bulky alkyl lithium reagents with a phosphaalkyne ($P{\equiv}CBu^t$): synthesis and structural characterisation of a mixed valent phosphorus cage compound, $P^{III}\{\mu\text{-}C(H)(Bu^t)\}_2\{\mu\text{-}C(H)(SiMe_3)Si(Me)_2C(H)_2\}P^V{=}C(SiMe_3)_2$, and a phosphaalkenyl-substituted η^3-azaallyl-lithium complex, $[Li(tmeda)\{C(SiMe_3)(2\text{-}NC_5H_3Me\text{-}6)[P{=}C(Bu^t)(SiMe_3)]\}]$, **645**, 256
Cage compounds
Directing role of anions in the syntheses of the silver–alkynyl cages $[Ag_{14}(C{\equiv}C^tBu)_{12}X][BF_4]$ (X = F, Cl, Br) and silver–alkynyl polymers $[Ag_3(C{\equiv}C^tBu)_2(X)]_n$ (X = Tos, NO_3), **652**, 87
Calcium
Synthesis and structural characterisation of 'solvent-free' lithium–calcium hexamethyldisilazide, $[Li\{\mu\text{-}N(SiMe_3)_2\}_2Ca\{N(SiMe_3)_2\}]$, exhibiting a double ration of agostic $H_3C\cdots Li$ and $H_3C\cdots Ca$ intramolecular interactions, **648**, 288
Synthesis and structures of crystalline bis(trimethylsilyl)methanido complexes of potassium, calcium and ytterbium, **663**, 263
Calcium complexes
A series of soluble, discrete homo and heteroleptic Ca(II) complexes of hexanuclear sulfidochloride rhenium clusters, $[Ca(X)_n(Y)_m][Re_6S_6Cl_8]$, ($n = 6$, $m = 0$, X = DMF, THF, DMSO; $n = 4$, $m = 3$, X = MeCN, Y = THF, dioxane) and the 1D co-ordination polymer $[Ca(MeCN)_3(OH_2)_2(dioxane)_2][Re_6S_6Cl_8]\cdot(dioxane)(MeCN)$, **643-644**, 301
Calculations by ab initio density-functional method
Generation of $[1,2\text{-}(CH_2)_2C_5Me_3MC_5Me_4CH_2\text{-}1']^{3+}$ (M = Ru, Os) trications and determination of their structures by comparing NMR-spectra with density-functional method calculations, **645**, 87
^{13}C- and ^{29}Si-NMR
Regio- and stereoselective addition of sterically hindered silylboranes to terminal alkynes, **646**, 179
ε-Caprolactone
Synthesis, characterization of homoleptic lanthanide amidinate complexes and their catalytic activity for the ring-opening polymerization of ε-caprolactone, **662**, 144
Carbaboranes
Syntheses of the $B_{(8)}$-hydroxy- and $B_{(8,8')}$-dihydroxy-derivatives of the bis(1,2-dicarbollido)-3-cobalt(1-)ate ion by its reductive acetoxylation and hydroxylation: molecular structure of $[8,8'\text{-}\mu\text{-}CH_3C(O)_2{<}(1,2\text{-}C_2B_9H_{10})_2\text{-}3\text{-}Co]^0$ zwitterion determined by X-ray diffraction analysis, **649**, 181
Carbanion
Enantiomerically enriched 'carbanions': Studies on the stereochemical course of selective transformations of metal alkyls, **661**, 149
Carbanion rearrangements
Polylithiumorganic compounds: Part 28. The reaction of allene and alkyl substituted allenes with lithium metal, **642**, 1
Carbanions
Reactivity of the lithium anion of the (*S*,*S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, **643-644**, 130
Carbapenem
Application of cross-coupling reactions in Merck, **653**, 279
Carbazole
Oxidative insertion into the N–H bond of carbazole, indole and pyrrole with zerovalent metals, **664**, 170
Carbene
A hexacarbene complex derived from 1,1′-methylenebis(4-butyl-1*H*-1,2,4-triazolium) diiodide. Synthesis, characterization and catalytic activity, **660**, 50
Structural and spectroscopic studies of carbene and N-donor ligand complexes of Group 13 hydrides and halides, **656**, 203
Synthesis and crystal structure of *N*-heterocyclic carbene complex of silver, **654**, 233

The $Cl_2(PCy_3)(IMes)Ru(=CHPh)$ catalyst: olefin metathesis versus olefin isomerization, **643-644**, 247
Carbene analogues
Some recent advances in the chemistry of silicon and its homologues in low coordination states, **646**, 39
Carbene complex
Convenient access to an alkenyl(biscarbene)-bridged heterobinuclear (Ru–W) complex. X-ray structure of $[(\eta^6\text{-}C_6Me_4H_2)Ru{=}C(OMe)(CH{=}CHC_6H_4CH{=}CH{-}CO_2Me)(Cl)(Me)(Cl)(PMe_3)][PF_6]$, **643-644**, 498
The unusual reaction of $Ga(C_5Me_5)_3$ with a nucleophilic carbene, **643-644**, 487
Carbene complexes
A tertiary phosphine that is too bulky: preparation of catalytically less active carbene and vinylidene ruthenium(II) complexes, **641**, 203
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, **643-644**, 253
Metal complexes of anionic 3-borane-1-alkylimidazol-2-ylidene derivatives, **641**, 195
Reactions of complex ligands: Part 94. Chromium-templated angular versus linear benzannulation of dibenzofuran and haptotropic metal migration in tetracyclic fused arenes, **641**, 185
The first carbene-*C*,*N* chelate tetracarbonyl dihalogeno and carbene-*C*,*O* chelate tetracarbonyl benzochinone tungsten complexes, **651**, 66
The first metal complexes of bis(diisopropylamino)carbene: synthesis, structure and ligand properties, **649**, 219
Carbene ligands
Acid controlled alkyne dimerisation initiated by a Ru–carbene precursor, **659**, 159
Carbenes
Catalytic transformations of diazo compounds promoted by platinum(0) and dicationic platinum(II) complexes, **642**, 32
Metal complexes of anionic 3-borane-1-alkylimidazol-2-ylidene derivatives, **641**, 195
Carbenoids
EXAFS investigation of metal organic synthesis tools, **649**, 128
Carboalumination–cross-coupling tandem
A genealogy of Pd-catalyzed cross-coupling, **653**, 34
Carboethoxy
The synthesis and characterization of 1-formyl-2-acylcyclopentadienylthallium compounds, **642**, 268
Carbohydrates
Selective reactions of transition-metal-generated radicals, **661**, 159
Carbometalation
Synthesis of functionalized alkenes by transition metal-catalyzed carbostannylations of alkynes and dienes followed by cross-coupling reactions, **653**, 114
Carbon–carbon bond
Catalytically assisted carbon–carbon coupling reaction: a French–Japanese 'cuisine', **653**, 20
Carbon–carbon bond formation
Proton induced coupling reactions in dinuclear σ-alkynyl-μ-methylene-rhodium complexes, **663**, 145
Carbon–carbon bond formation
Catalytic asymmetric cross-coupling, **653**, 41
Carbon chain bridged metals
Carbon chain bridged metals: a theoretical approach. Odd chains, **656**, 156
Carbon dioxide
Investigation of the hydroformylation of ethylene in liquid carbon dioxide, **650**, 249
Structure of dialkyltin diaryloxides and their reactivity toward carbon dioxide and isocyanate, **659**, 133
Carbon disulfide
Reactions of cyclomanganated complexes with carbon disulfide: routes to η^2-aryldithiocarboxylate-$Mn(CO)_4$ complexes and to the trithiocarbonate complex $(\mu_3\text{-}CS_3)_2Mn_4(CO)_{16}$, **664**, 288
Carbon–hydrogen bond cleavage
The syntheses and structures of coordinatively unsaturated aryloxy-hydride complexes of molybdenum, $Mo(PMe_3)_4(OAr)H$: reversible C–H bond activation and comparison with their tungsten analogues, **652**, 37
Carbon monoxide
Reactions of methyl(phenyl)silylene with CO and PH_3—the formation of acid–base complexes, **641**, 156
Reactions of tetraphosphine complex $[Mo\{meso\text{-}o\text{-}C_6H_4(PPhCH_2CH_2PPh_2)_2\}(Ph_2PCH_2CH_2PPh_2)]$ with nitrile, CO, and isocyanide, **658**, 106
Carbonyl
Allyl complexes of molybdenum with Schiff base ligands. The crystal structures of $[MoCl(CO)_2\{N(C_6H_4\text{-}2\text{-}OMe){=}C(Me)\text{-}C_5H_4N\}(\eta^3\text{-}C_3H_5)]$ and $[MoCl(CO)_2\{N(Me){=}C(Ph)C_5H_4N\}\text{-}(\eta^3\text{-}C_3H_5)]$ are described, **660**, 91
Carbonyl derivatives of iron(0) from the reaction of $FeR_2(bipy)_2$ (R = Me, Et) with carbon monoxide, **662**, 137
3,3-Dimethyl-1-butyne complexes of tungsten(II). Crystal structures of $[WI_2(CO)(NCPh)(\eta^2\text{-}HC_2Bu^t)_2]$ and $[WI_2(CO)\{P(OR)_3\}_2(\eta^2\text{-}HC_2Bu^t)]$ (R = Me and Et), **658**, 77
High order cycloaddition reactions of $M(CO)_3$-coordinated *N*-cyanoazepine with alkynes; M: Cr, Mo, W, **651**, 132
Mixed-metal cluster chemistry: Part 20. Syntheses, crystal structures and electrochemical studies of $W_2Ir_2(\mu\text{-}L)(CO)_8(\eta^5\text{-}C_5H_4Me)_2$ (L = dppe, dppf), **650**, 133
Reactions of acylferrate anion $[CH_3COFe(CO)_4]^-$ with methyl methyl iodide and acetylenes. Synthesis of mono- and dinuclear alkenyl ketone iron complexes. X-ray structure of $[NEt_4][Fe(CO)_3(COCPh)_2)]$, **642**, 107
Reactions of the cationic diruthenium carbonyl complex $[Ru_2(\mu\text{-}dppm)_2(CO)_4(\mu,\eta^2\text{-}O_2CMe)]^+$ with bidentate ligands; intramolecularly assisted stereospecific synthesis via the second-sphere face-to-face π–π stacking interactions, **650**, 268
Substitution kinetics of $Cr(CO)_5(\eta^2\text{-}Z\text{-cyclooctene})$ with tetracyanoethylene, **658**, 274
Syntheses and structures of some coordinatively saturated and unsaturated diruthenium carbonyl complexes, **658**, 117
Syntheses, X-ray structures, and reactions of ruthenium carbonyl complexes containing 1,1-dithiolates, **650**, 37
Synthesis and characterisation of derivatives of $[HIr_4(CO)_{10}(\mu\text{-}PPh_2)]$ with mono and diphosphines; X-ray molecular structures of $[HIr_4(CO)_8(PPh_3)_2(\mu\text{-}PPh_2)]$ and $[HIr_4(CO)_8\{Ph_2P(CH_2)_nPPh_2\}(\mu\text{-}PPh_2)]$ ($n = 1$ and 4), **656**, 188
Synthesis and reactions of the cationic seven-coordinate complexes, $[MoI(CO)_3(NCR)\{Ph_2P(CH_2)_nPPh_2\}][BF_4]$ (R = Me, $n = 1$, 2 and 3; R = Et, $n = 1$). Crystal structures of $[MoI_2(CO)_2(PPh_3)\{Ph_2P(CH_2)PPh_2\}]$, $[MoI(CO)_2\{Ph_2P(CH_2)PPh_2\}_2][BF_4]\cdot CH_2Cl_2$, $[MoCl_3O\{Ph_2PO(CH_2)OPPh_2\}]$ and $[Mo_3(\mu_3\text{-}I)_2\{\mu_2\text{-}Ph_2P(CH_2)PPh_2\}_3]I$, **664**, 45
Synthesis and X-ray structures of hydridotris(1-pyrazolyl)borate carbonyl complexes of ruthenium, **648**, 193
Tricarbonylrhenium(I) complexes of phosphine-derivatized amines, amino acids and a model peptide: structures, solution behavior and cytotoxicity, **650**, 123
Carbonyl abstraction
Carbonyl abstraction reactions of $Cp^*Mo(PMe_3)_3H$ with CO_2, $(CH_2O)_n$, HCO_2H, and MeOH: the synthesis of $Cp^*Mo(PMe_3)_2(CO)H$ and the catalytic decarboxylation of formic acid, **642**, 9
Carbonylation
Development of new palladium catalysts for the alkoxycarbonylation of aryl chlorides, **641**, 30

Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, **643-644**, 12
Intramolecular C–N bond formation in the reductive elimination of *ortho*-palladated arylhydrazones of acetophenone, **658**, 15
Iridium complex-catalyzed carbonylation of allylic phosphates, **651**, 137
Pd–benzothiazole carbene catalysed carbonylation of aryl halides in ionic liquids, **645**, 152
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, **643-644**, 331
Carbonyl complexes
Chemistry and ligating properties of the 1,2,4-thiadiphosphole $P_2SC_2Bu^t_2$, **655**, 7
Coordination chemistry of neutral quinolyl- and aminophenylcyclopentadiene derivatives, **641**, 81
Facile syntheses of new multidentate (phosphino)amines: X-ray structure of 1,4-$\{(OC)_4Mo(Ph_2P)_2NCH_2\}_2C_6H_4$, **664**, 294
Intramolecular interactions in 2,6-pyridylacetylenes and their $Co_2(CO)_4$dppm complexes, **648**, 251
Reaction of bromopentacarbonylrhenium(I) with ferrocenylcarbaldehyde thiosemicarbazones: the first X-ray diffraction studies of metal carbonyl complexes containing bidentate thiosemicarbazone ligands, **656**, 1
Reaction of silylpentacarbonylmanganese with hydride-transfer reagents: reduction of carbonyl ligands accompanied with Si–C C and C–C coupling, **650**, 91
Synthesis and structure of the novel mixed Sb/Se and Sb/Te containing iron carbonyl clusters $[Fe_3(\mu_3\text{-}Y)(\mu_3\text{-}SbMes)(CO)_9]$ (Y = Se, Te) and $[Fe_3(\mu_3,\eta^2{:}\eta^1\text{-}SeSbMes)(\mu_3\text{-}SbMes)(CO)_{10}]$, **658**, 204
Carbonyl compounds
Homogeneously catalysed isomerisation of allylic alcohols to carbonyl compounds, **650**, 1
Multiple arylation of carbonyl compounds via palladium catalysis, **653**, 161
Carbonyl ligands
Formation of novel unsaturated fluorinated ligands by metal induced C–C coupling reaction of difluoroallene with fluoromethylidyne ligands of $Fe_3(CO)_9(\mu_3\text{-}CF)_2$, **641**, 215
Synthesis, reactivity and structures of ruthenium carbonyl clusters with telluride and hydride ligands, **659**, 22
Carbonylmetal anions
Unusual reactions of cationic bridging carbyne complexes of dimethylsilane-bridged bis(η^5-cyclopentadienyl)diiron tricarbonyl with carbonylmetal anions, **658**, 214
Carbonyl substitution
Phosphine substituted $Ru_3(\mu\text{-dppm})(CO)_{10}$: structural trends within $[Ru_3(\mu\text{-dppm})(PR_3)(CO)_9]$ (R = Et, Ph, Cy and Pr^i), **655**, 227
Carbonyl substitution reactions
Carbonyl substitution chemistry of neutral and cationic triruthenium cluster complexes derived from 1,1-dimethylhydrazine. Incorporation of two and three phosphane ligands, **663**, 227
Carborane
Synthesis and reactivity of the rhodium monocarbollide complexes [1-NH=CMe_2-2-Cl-2-PPh_3-*closo*-2,1-$RhCB_{10}H_{10}$] and [1-NH_3-2-Cl-2-PPh_3-*closo*-2,1-$RhCB_{10}H_{10}$], **651**, 34
Carboranes
Functionalized cobalt bis(dicarbollide) ions as selective extraction reagents for removal of M^{2+} and M^{3+} cations from nuclear waste, crystal and molecular structures of the [8,8′-μ-$CIP(O)(O)_2$<(1,2-$C_2B_9H_{10})_2$-3,3′-Co]$HN(C_2H_5)_3$ and [8,8′-μ-$Et_2NP(O)(O)_2$<(1,2-$C_2B_9H_{10})_2$-3,3′-Co]$(HN(CH_3)_3)$, **657**, 59
Molecular construction based on icosahedral carboranes and aromatic *N*,*N*′-dimethylurea groups. Aromatic layered molecules and a transition metal complex, **657**, 48
Recent developments in the chemistry of the nine-vertex monocarbaboranes, **657**, 3
The B–I activation in *o*-carborane clusters: their fate towards B–H. Easy synthesis of $[7,10\text{-}C_2B_{10}H_{13}]^-$, **642**, 16
Carbosilane
Synthesis of polysilanes bearing pendant carbosilyl groups and ^{29}Si-NMR probe on the tacticity using side chain silicon atoms, **650**, 223
Carboxylate
Isolation and structural characterization of some stable Pd(II) carboxylate complexes supported by 1,1′-bis(diphenylphosphino) ferrocene (dppf), **658**, 159
Carboxylates
Detection of aryllead(IV) carboxylates and their solvent adducts by ESI-mass spectrometry, **645**, 176
Synthesis, spectroscopic characterisation of 1,1,2,3,4,5,6-heptahydro-1,1-di(carboxylato)telluranes and 1,3-dihydro-2λ^4-benzotellurole-2,2-diyl dicarboxylates: Crystal structures of 1,1,2,3,4,5,6-heptahydro-1,1-di(benzoato)tellurane and 1,3-dihydro-2λ^4-benzotellurole-2,2-diyl dibenzoate, **658**, 34
The synthesis and structural characterization of some triorganotin(IV) complexes of 2-{[(*E*)-1-(2-hydroxyaryl)alkylidene]amino}acetic acid. Crystal and molecular structures of $Ph_3Sn(2\text{-}OHC_6H_4C(H)=NCH_2COO)$ and $Me_3Sn(2\text{-}OHC_6H_4C(CH_3)=NCH_2COO)$, **654**, 100
Carboxylation
Carboxylation of 3,3′,4,4′-tetramethyl-1,1′-diphosphaferrocene with CO_2 in the presence of $AlCl_3$, **642**, 143
Carboxylato–
New insights into the reactivity of the tantalocene hydride Cp'_2TaH_3 ($Cp' = \eta^5\text{-}^tBuC_5H_4$). Synthesis and characterisation of cationic Ta(V) complexes with 0,0 and *S*,*N* chelating ligands, **656**, 139
Carbyne
Raman and infrared spectra and pressure tuning Raman and infrared spectra of multinuclear metal carbyne complexes, **648**, 93
Carbyne complexes
Acetonitrile activation in di-iron μ-carbyne complexes: synthesis and structure of the cyanomethyl complex $[Fe_2(\mu\text{-}CNMe_2)(\mu\text{-}CO)(CO)(CH_2CN)(Cp)_2]$, **649**, 64
Alkynylcarbyne complexes containing various tri- and bidentate ligands such as cyclopentadienide, tris(pyrazolyl)borate, bis(pyrazolyl)acetate and tmeda: synthesis and spectroscopic properties, **641**, 134
Cascade reactions
New cascade and multiple cross-coupling reactions for the efficient construction of complex molecules, **653**, 129
Catalysis
A hexacarbene complex derived from 1,1′-methylenebis(4-butyl-1*H*-1,2,4-triazolium) diiodide. Synthesis, characterization and catalytic activity, **660**, 50
Alkyne oligomerization catalyzed by molybdenum(0) complexes, **649**, 173
Allyl–palladium complexes with fluorinated benzene thiolate ligands. Examination of the electronic effects in the Pd-catalyzed allylic alkylation reaction with the catalytic system $[(\eta^3\text{-}C_3H_5)Pd(\mu\text{-}SR_f)]_2/PR_3$, **654**, 16
Catalytic oxidations by peroxy, peroxo and oxo metal complexes: an interdisciplinary account with a personal view, **661**, 3
Defining effective chiral binding sites at lanthanides—highly enantioselective reagents and catalysts from binaphtholate and pybox ligands, **647**, 151
Hydrosilylation of alkynylsilanes utilizing organolanthanide and Group 3 metallocene complexes, **647**, 225
Insertions into lanthanide–ligand bonds in organolanthanide chemistry, **647**, 28
New complexes of palladium(II) with chelating heterocyclic

nitrogen ligands. Characterization and catalytic activity in CO–styrene copolymerization. Crystal structure of $[Pd(bipy)_2][BAr'_4]_2$, $Ar' = [3,5\text{-}(CF_3)_2C_6H_3]$, **664**, 77
Oxidation of ketone by palladium(II). α-Hydroxyketone synthesis catalyzed by a bimetallic palladium(II) complex, **659**, 50
Oxidation of olefins by palladium(II). 18. Effect of reaction conditions, substrate structure and chiral ligand on the bimetallic palladium(II) catalyzed asymmetric chlorohydrin synthesis, **656**, 168
Phosphane- and phosphorane *Janus Head* ligands in metal coordination, **661**, 111
Porous boron nitride supports obtained from molecular precursors. Influence of the precursor formulation and of the thermal treatment on the properties of the BN ceramic, **657**, 98
Synthesis, characterization and catalytic activity in Heck-type reactions of orthometallated Pd^{II} and Pt^{II} complexes derived from (1*R*,2*R*)-1,2-diaminocyclohexane, **650**, 157
Synthesis of novel metallacyclic zirconocene complexes from ω-alkenyl-functionalized zirconocene dichloride complexes and their use in the α-olefin polymerization, **648**, 134
Synthesis of zirconocene amides and ketimides and an investigation into their ethylene polymerization activity, **656**, 63
The catalytic synthesis of thiacrowns from thiiranes by Group VI and VII transition metal carbonyl complexes, **652**, 51
Transformations of organosilanes by Pt(II) complexes with hemilabile P,N-chelating ligands, **646**, 53

Catalyst
Hydrosilylation of alkynes catalyzed by platinum on carbon, **645**, 1
Synthesis, characterisation and molecular structure of $[Rh(COE)_2(acac)]$ (COE = cyclooctene, η^2-C_8H_{14}), an important starting material for the preparation of rhodium catalyst precursors, **649**, 199

Catalyst activation
Synthesis and structural characterization of $[H(OEt_2)_2]^+[(C_3H_3N_2)\{B(C_6F_5)_3\}_2]^-$ — a Brønsted acid with an imidazole-derived 'non-coordinating' anion, **641**, 148

Catalyst separation
Polyether phosphine oxide induced phase separable homogeneous catalysis for hydroformylation of higher olefins, **664**, 1
Polyether phosphite for hydroformylation of higher olefins in non-aqueous system and catalyst recovery, **654**, 83

Catalytic
Homo coupling, disproportionation and cross coupling of alkyl groups. Role of the transition metal catalyst, **653**, 11

Catalytic activity
Structural characterization and catalytic activity of the rhodium–carbene complex $Rh(PPh_3)_2(IMes)Cl$ (IMes = bis(1,3-(2,4,6-trimethylphenyl)imidazol-2-ylidene), **658**, 126

Catalytic cycle
Discovery of the cross-coupling reaction between Grignard reagents and $C(sp^2)$ halides catalyzed by nickel–phosphine complexes, **653**, 23

Catalytic decarboxylation
Carbonyl abstraction reactions of $Cp^*Mo(PMe_3)_3H$ with CO_2, $(CH_2O)_n$, HCO_2H, and MeOH: the synthesis of $Cp^*Mo(PMe_3)_2(CO)H$ and the catalytic decarboxylation of formic acid, **642**, 9

Catalytic transfer hydrogenation
Neutral and cationic (η^6-arene)-ruthenium(II) complexes containing the iminophosphorane–phosphine ligand $Ph_2PCH_2P(=N\text{-}p\text{-}C_5F_4N)Ph_2$: influence of the arene ring in catalytic transfer hydrogenation of cyclohexanone, **663**, 32

Catalytic yield
Characterization of a metallocene/co-catalyst system supported on silica by Fourier-Transform Raman spectroscopy, **651**, 80

Catalyzed reaction
Platinum- and nickel-catalyzed reactions of 1,2-dimethyl-1,2-diphenyl-1,2-disilacyclopentane with alkynes, **645**, 47

Catenanes
Recent studies on alkynyl complexes of the Group 11 and 12 metals, **641**, 126

Cationic
Nitrile exchange reactions of $[WI(CO)(NCMe)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$; X-ray crystal structures of $[WI(CO)(L)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$ {L = NC^iPr, NC^tBu, $NCCH_2Ph$, $1,2\text{-}C_6H_4(NCCH_2)_2$}, **664**, 37
Synthesis and reactions of the cationic seven-coordinate complexes, $[MoI(CO)_3(NCR)\{Ph_2P(CH_2)_nPPh_2\}][BF_4]$ (R = Me, $n = 1$, 2 and 3; R = Et, $n = 1$). Crystal structures of $[MoI_2(CO)_2(PPh_3)\{Ph_2P(CH_2)PPh_2\}]$, $[MoI(CO)_2\{Ph_2P(CH_2)PPh_2\}_2][BF_4]\cdot CH_2Cl_2$, $[MoCl_3O\{Ph_2PO(CH_2)OPPh_2\}]$ and $[Mo_3(\mu_3\text{-}I)_2\{\mu_2\text{-}Ph_2P(CH_2)PPh_2\}_3]I$, **664**, 45

Cationic iridium(III)–silylene complex
Synthesis and characterization of the sterically hindered iridium(III)–silyl complex: $(Et_3P)_3(H)_2Ir[Si(H)Cl(C_6H_3\text{-}Mes_2\text{-}2,6)]$ and the generation of the cationic iridium(III)-silylene complex: $[(Et_3P)_3(H)_2Ir{=}Si(H)(C_6H_3\text{-}Mes_2\text{-}2,6)][B(C_6F_5)_4]$, **654**, 224

Cationic ruthenium carbenes
An 'Old Hydride' in a new synthesis: a convenient approach to Grubbs-type carbene complexes $(PPh_3)_2Cl_2Ru{=}CH{-}CH{=}CR_2$ and their hexacoordinate acetonitrile adducts, **641**, 220

C,B-diphenylation
Polyhedral monocarbaborane chemistry: The C,B-*para*-diphenyl monocarbadodecaborane anion $[1,12\text{-}Ph_2\text{-}closo\text{-}1\text{-}CB_{11}H_{10}]^-$, **657**, 176

C–C bond formation
Iridium-containing cumulenes: how to prepare and how to use, **661**, 137

C–C bond-formation
Palladium-catalyzed C–N and C–C cross-couplings as versatile, new avenues for modifications of purine 2′-deoxynucleosides, **653**, 234

C–C coupling
Reaction of silylpentacarbonylmanganese with hydride-transfer reagents: reduction of carbonyl ligands accompanied with Si–C C and C–C coupling, **650**, 91

C–C coupling reactions
Preparation, properties, and reactions of metal-containing heterocycles: Part CVIII. A novel generation of rigid, nanoscaled 1,1′-ferrocenediyl-bridged bis(pyridine), bis(bipyridine), and bis(phenanthroline) ligands, **660**, 78

CDA analyses
Coordinated olefins, $H_2C{=}CHR$, and phosphanes, PH_2R: a theoretical study of the R substituent effect, **643-644**, 285

Ceramization
Pyrolysis of poly[2,4,6-tri(methylamino)borazine] and its conversion into BN fibers, **657**, 91

CH-acidic compounds
Selective reactions of transition-metal-generated radicals, **661**, 159

C–H activation
Cyclopalladated compounds with a bidentate [C, N]/terdentate [C, N, S] benzylidenethiophene imine ligand. Crystal and molecular structures of $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H){=}NCH_2(C_4H_3S)\}(\mu\text{-}OAc)]_2$, $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H){=}NCH_2(C_4H_3S)\}\text{-}(Cl)\cdot(PPh_3)]$ and $[\{Pd[2,3\text{-}(MeO)_2C_6H_2C(H){=}NCH_2(C_4H_3S)](Cl)\}_2(\mu\text{-}Ph_2P(CH_2)_4PPh_2)]$, **654**, 162
Heterodimetallic palladium(II) compounds containing terdentate $[Csp^2(ferrocene),N,N']^-$ ferrocenyl ligands, **651**, 105
Palladium(II) induced preferential activation of the $\sigma(C_{sp3}{-}H)$ versus the $\sigma(C_{sp^2}$, ferrocene–H) bond of (S_C)-$[(\eta^5\text{-}C_5H_5)Fe\{(\eta^5\text{-}C_5H_4){-}CH{=}N{-}CH(CO_2Me)CH_2{-}CH_2{-}SMe\}]$, **645**, 146

Synthesis and crystal structures of μ-1,3-bis(η^5-tetramethylcyclopentadienyl)-1,1,3,3-tetramethyldisiloxane)[η^2-bis(trimethylsilyl)ethyne]titanium(II) and a doubly tucked-in product of its thermolysis, **658**, 235

Unusual structures of lithium terphenyl derivatives, **643-644**, 461

Chalcogen

Reactivity studies of monoacetylide species towards chalcogen-bridged mixed-metal clusters: Synthesis and characterisation of $[(\eta^5\text{-}C_5H_5)_2Fe_2RuM_2(CO)_6(\mu_3\text{-}E)_2\{\mu_4\text{-}CC(Ph)C(Ph)C\}]$ (M = Mo, W; E = S, Se) and $[(\eta^5\text{-}C_5H_5)_2Fe_2Ru_2M_2(CO)_9(\mu_3\text{-}E)_2\{\mu\text{-}CCPh\}_2]$ (M = W, E = S, Se), **659**, 196

Chalcogen-bridged bis(aryloxo) ligand

Synthesis of *cis*-dichloride complexes of Group 6 transition metals bearing alkyne and chalcogen-bridged chelating bis(aryloxo) ligands as catalyst precursors for ring-opening metathesis polymerization, **654**, 74

Chalcogen-bridged bis(aryloxo) ligands

Synthesis of novel oxo complexes of tungsten and molybdenum with various chalcogen-bridged chelating bis(aryloxo) ligands and their catalytic behavior for ring-opening metathesis polymerization, **651**, 114

Chalcogenide compounds

Chiral sulfur diphosphazanes derived from S-$(Ph_2P)_2N(CHMePh)$ and its rhodium(I), (III) and iridium(III) complexes. Crystal structures of $Ph_2P(S)N(CHMePh)PPh_2$, $\{Ph_2P(S)\}_2N(CHMePh)$ and $[(Cp^*)MCl\{\eta^2\text{-}P,S\text{-}Ph_2PNHP(S)Ph_2\}]BF_4$, $Cp^* = \eta^5\text{-}C_5Me_5$; M = Rh, Ir, **651**, 90

C–H bond activation

Metalation of aromatic heterocycles by yttrium alkyl complexes that contain a linked amido-cyclopentadienyl ligand: synthesis, structure and Lewis base adduct formation, **647**, 158

The activation of C–H bonds in internal alkenes and dienes by {NiCp} species formed in the reaction of nickelocene with alkali metals, **663**, 249

Chelate complexes

Synthesis, structure and catalytic activity of new iminophenolato complexes of scandium and yttrium, **663**, 63

The first carbene-*C*,*N* chelate tetracarbonyl dihalogeno and carbene-*C*,*O* chelate tetracarbonyl benzochinone tungsten complexes, **651**, 66

Chelate ring size

Structural and mechanistic studies of the copper(II)-assisted *ortho*-hydroxylation of benzoates by trimethylamine N-oxide, **641**, 70

Chelating ligand

Cationic ruthenium(II) complexes containing a chelating $\eta^1{:}\eta^6$-phosphinoarene ligand; $[RuCl(L)(PPh_2(CH_2)_3\text{-}\eta^6\text{-}C_6H_5)][PF_6]$ (L = $P(OPh)_3$, $P(OMe)_3$, PPh_3, PMe_3, NCMe, NC_5H_5), **659**, 1

Chelating ligands

Synthesis of 1,2-bis[(diorgano)phosphino]ethanes via Michaelis–Arbuzov type rearrangements, **646**, 230

Chemical products

Some applications of the Grignard cross-coupling reaction in the industrial field, **653**, 288

C–H···π intermolecular contact

Preparation and structural characterization of six new diorganotin(IV) complexes of the $R_2Sn(SaleanH_2)$ and $R_2Sn(SalceanH_2)$ type (R = Me, ^{n}Bu, Ph), **664**, 188

Chiral

Chiral trialkoxysilanols derived from terpene alcohols. Molecular structures of tris([(1*S*)-*endo*]-(−)-bornoxy)silanol and tetrakis((−)-menthoxy)silane, **648**, 188

Doubly cyclopalladated pyridazines: chiral liquid crystals, **645**, 246

Electronic effects on the acidity of phosphorus(III) triflates, **643-644**, 516

Synthesis, characterization and catalytic activity in Heck-type reactions of orthometallated Pd^{II} and Pt^{II} complexes derived from (1*R*,2*R*)-1,2-diaminocyclohexane, **650**, 157

Synthesis, reaction and enantiomeric resolution of chiral clusters containing SRuNiM (M = Mo, W) core, **664**, 201

Chiral auxiliary

Enantioselective synthesis of phosphinyl peptidomimetics via an asymmetric Michael reaction of phosphinic acids with acrylate derivatives, **646**, 212

Chiral bis(oxazolines)

Catalytic reduction of acetophenone with transition metal systems containing chiral bis(oxazolines), **659**, 186

Chiral complexes

Stereoselective addition reactions of ruthenium thioaldehyde complexes, **661**, 129

Chiral copper(II) complex

Synthesis of a novel copper(II) complex and its crystal structure, **650**, 274

Chiral diphosphazanes

Chiral sulfur diphosphazanes derived from S-$(Ph_2P)_2N(CHMePh)$ and its rhodium(I), (III) and iridium(III) complexes. Crystal structures of $Ph_2P(S)N(CHMePh)PPh_2$, $\{Ph_2P(S)\}_2N(CHMePh)$ and $[(Cp^*)MCl\{\eta^2\text{-}P,S\text{-}Ph_2PNHP(S)Ph_2\}]BF_4$, $Cp^* = \eta^5\text{-}C_5Me_5$; M = Rh, Ir, **651**, 90

Chiral diphosphines

Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, **643-644**, 424

Chiral α,ω-diynes

One pot stereoselective synthesis of chiral α,ω-diynes from bromoallenes and organobis(heterocuprates), **648**, 109

Chiral enephosphorylated derivatives

Synthesis of P-chiral enephosphonic acid derivatives, **662**, 83

Chiral ferrocenes

Asymmetric addition of diethylzinc to aromatic aldehydes by chiral ferrocene-based catalysts, **649**, 258

Chirality

Catalytic isomerization of *N*-allylic substrates with chiral Os_3 clusters as potentially enantioselective reaction, **658**, 147

Chiral arene ruthenium complexes: Part 3. [Ruthenium(η^6-arene)(η^4-1,5-cyclooctadiene)] complexes with N or O donor functions in the arene side chain, **641**, 90

Functionalized cobalt bis(dicarbollide) ions as selective extraction reagents for removal of M^{2+} and M^{3+} cations from nuclear waste, crystal and molecular structures of the [8,8′-μ-$CIP(O)(O)_2$<$(1,2\text{-}C_2B_9H_{10})_2$-3,3′-Co]$HN(C_2H_5)_3$ and [8,8′-μ-$Et_2NP(O)(O)_2$<$(1,2\text{-}C_2B_9H_{10})_2$-3,3′-Co]$(HN(CH_3)_3)$, **657**, 59

Chiral ligand

New ruthenium(II) complexes containing the chiral ligand (4*S*)-2-[(S_p)-2-(diphenylphosphino)ferrocenyl]-4-(methylethyl)oxazoline (FcPN). X-ray structures of *mer*–*trans*-$[RuCl_2(dppm)(FcPN)]$ (dppm = bis(diphenylphosphi-bis(diphenylphosphino)methane) and *cis*-$[RuCl_2(CO)(py)(FcPN)]$, **663**, 204

Syndiotactic polystyrene with very high molecular weight produced by sterically and electronically modified catalyst, **655**, 186

Chiral ligands

Synthesis of novel chiral bis(ferrocenyl) ligands and their use as voltammetric metal cation sensors, **656**, 211

Chiral lithium amide

Chlorotrimethylsilane-mediated Michael addition reactions of chiral benzylic anions derived from η^6-chromiumtricarbonyl complexes, **658**, 21

Chiral metal complexes

Functionalized cobalt bis(dicarbollide) ions as selective extraction reagents for removal of M^{2+} and M^{3+} cations from nuclear waste, crystal and molecular structures of the [8,8′-μ-$CIP(O)(O)_2$<$(1,2\text{-}C_2B_9H_{10})_2$-3,3′-Co]$HN(C_2H_5)_3$ and [8,8′-μ-$Et_2NP(O)(O)_2$<$(1,2\text{-}C_2B_9H_{10})_2$-3,3′-Co]$(HN(CH_3)_3)$, **657**, 59

Chiral phosphines
Enantioselective synthesis of platinum group metal complexes with the chiral PCP pincer ligand *R*,*R*-{C_6H_4-2,6-(CH_2P*PhBu^t)$_2$}. The crystal structure of *R*,*R*-PdCl{C_6H_3-2,6-(CH_2P*PhBu^t)$_2$}, **654**, 44
Chiral secondary and tertiary phosphines
Hydrophosphination with cationic primary phosphine iron complexes: synthesis of P-chiral functionalized phosphines, **661**, 95
Chloloarene
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, **643–644**, 125
Chloride
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Chloro
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Chlorogallium compounds
Si–C bond cleavage in the reaction of gallium chloride with lithium bis(trimethylsilyl)amide and thermolysis of base adducts of dichloro(trimethylsilyl)amido gallium compounds, **649**, 268
Chlorohydrins
Oxidation of olefins by palladium(II). 18. Effect of reaction conditions, substrate structure and chiral ligand on the bimetallic palladium(II) catalyzed asymmetric chlorohydrin synthesis, **656**, 168
Chloroketene
Reaction of (η^4-cycloheptatriene)Fe(CO)$_3$ with haloketenes: structure and reactivity of the cycloadducts, **648**, 164
Chlorosilane
Interactions of chloromethyldisilanes with tetrakis(dimethylamino)ethylene (TDAE), formation of $[TDAE]^{\bullet+}$ $[Si_3Me_2Cl_7]^-$, **662**, 14
Chlorotrimethylsilane
Chlorotrimethylsilane-mediated Michael addition reactions of chiral benzylic anions derived from η^6-chromiumtricarbonyl complexes, **658**, 21
Chromium
C_2-Bridged sandwich and half-sandwich entities with Ti(IV) and Cr(0) centers, **641**, 62
Chromium complexes coordinated with chelating disiloxane-1,3-diamido ligands as catalyst precursors for ethylene polymerization, **642**, 156
Fluxional behavior of chromium and tungsten complexes of monodentate bis(trimethylphosphine)diborane(4), [M(CO)$_5$(η^1-B_2H_4·2PMe$_3$)] (M = Cr, W): A model case for alkane–metal complexes, **659**, 102
High order cycloaddition reactions of M(CO)$_3$-coordinated *N*-cyanoazepine with alkynes; M: Cr, Mo, W, **651**, 132
Reactions of complex ligands: Part 94. Chromium-templated angular versus linear benzannulation of dibenzofuran and haptotropic metal migration in tetracyclic fused arenes, **641**, 185
Rydberg spectra of bis(η^6-benzene)chromium derivatives: Gas-phase photoabsorption study of bis(η^6-1,2,4-trimethylbenzene)chromium and bis(η^6-1,2,4,5-tetramethylbenzene)chromium, **649**, 100
Substitution kinetics of Cr(CO)$_5$(η^2-*Z*-cyclooctene) with tetracyanoethylene, **658**, 274
Synthesis and characterization of Group 6 transition-metal [70]fullerene derivatives containing dppb ligands. Crystal structure of *fac*-Mo(CO)$_3$(dppb)(CH_3CN), **662**, 51
Synthesis and structure of a chromium(III) complex coordinated by 1,1′-Bi-2-naphtholate ligands and its catalytic activity for ethylene polymerization, **648**, 226
Synthesis of 2-pyranylidene or (2-furyl)carbene–chromium complexes from conjugated enyne carbonyl compounds with Cr(CO)$_5$(THF), **645**, 228
Chromium carbonyl
The catalytic synthesis of thiacrowns from thiiranes by Group VI and VII transition metal carbonyl complexes, **652**, 51
η^6-Chromiumtricarbonyl
Chlorotrimethylsilane-mediated Michael addition reactions of chiral benzylic anions derived from η^6-chromiumtricarbonyl complexes, **658**, 21
Chromylchloride
Isolation of a stable Cr(V) intermediate in the oxidation of aryl-substituted alkenes by chromylchloride, **641**, 121
CIDNP
Spin chemistry of organometallic compounds: 2. Interaction of *N*-bromohexamethyldisilazane with allyltriorganolsilanes, **658**, 228
cis and *trans* isomers
Preparation and structural characterization of six new diorganotin(IV) complexes of the $R_2Sn(SaleanH_2)$ and $R_2Sn(SalceanH_2)$ type (R = Me, ^{n}Bu, Ph), **664**, 188
Claisen rearrangement
Synthesis of bis-oxazoline-ruthenium(II)-arene complexes. Combined catalytic isomerisation and Claisen rearrangement of bis-allyl ether, **662**, 63
β-Cleavage
Spin chemistry of organometallic compounds: 2. Interaction of *N*-bromohexamethyldisilazane with allyltriorganolsilanes, **658**, 228
Closed monocarbaborane
Polyhedral monocarbaborane chemistry: The C,B-*para*-diphenyl monocarbadodecaborane anion [1,12-Ph_2-*closo*-1-$CB_{11}H_{10}$]$^-$, **657**, 176
Close-packing
The use of Kitaigorodskii's *Aufbau* principle in the solid-state study of crystalline borane compounds. A preliminary account, **657**, 20
Closo-decaborate
Synthesis and derivatization of the 2-amino-*closo*-decaborate anion [2-$B_{10}H_9NH_3$]$^-$, **657**, 163
Closo monocarbaborane series
Polyhedral monocarbaborane chemistry: The *closo*-[$PhCB_7H_7$]$^-$ and *closo*-[$PhCB_{10}H_{10}$]$^-$ anions: the two missing species in the *closo*-[$PhCB_nH_n$]$^-$ sequence, **657**, 180
Cluster
Alkylderivatives of Stanna-*closo*-dodecaborate, **664**, 116
A structural isomer of the [$CoFe_3(CO)_{13}$]$^-$ anion, **645**, 281
Catalytic isomerization of *N*-allylic substrates with chiral Os_3 clusters as potentially enantioselective reaction, **658**, 147
CH and PC bond activations of PMe_2Ph ligands by an octahedral Ru_6 cluster, **651**, 124
Mixed-metal cluster chemistry: Part 20. Syntheses, crystal structures and electrochemical studies of $W_2Ir_2(\mu$-L)(CO)$_8$(η^5-$C_5H_4Me)_2$ (L = dppe, dppf), **650**, 133
Phosphine substituted $Ru_3(\mu$-dppm)(CO)$_{10}$: structural trends within [$Ru_3(\mu$-dppm)(PR_3)(CO)$_9$] (R = Et, Ph, Cy and Pr^i), **655**, 227
Phosphorus–hydrogen bond cleavage on a Ph_2PH-substituted μ_3-thioxo dicobalt–iron cluster as a route to bridging phosphido and thiophosphine ligands, **642**, 228
Rational synthesis of tricobalt-molybdenum and -tungsten butterfly clusters with alkyne ligands, **659**, 142
Reactivity of *cyclo*-$(PhX)_6$ (X = As, P) towards [M_3L_2(CO)$_{10}$] (M = Ru, L = CO or NCMe; M = Fe, L = CO), **664**, 27
Reactivity studies of monoacetylide species towards chalcogen-bridged mixed-metal clusters: Synthesis and characterisation of [(η^5-$C_5H_5)_2Fe_2RuM_2$(CO)$_6$(μ_3-E)$_2${μ_4-CC(Ph)C(Ph)C}] (M = Mo, W; E = S, Se) and [(η^5-$C_5H_5)_2Fe_2Ru_2M_2$(CO)$_9$(μ_3-E)$_2${μ-CCPh}$_2$] (M = W, E = S, Se), **659**, 196
Substitution reactions of [{Co(η^5-C_5H_5)}$_2${Fe(CO)$_2$(PPh_3)}(μ_3-S)(μ_3-CS)], **651**, 60

Synthesis and characterisation of derivatives of $[HIr_4(CO)_{10}(\mu\text{-}PPh_2)]$ with mono and diphosphines; X-ray molecular structures of $[HIr_4(CO)_8(PPh_3)_2(\mu\text{-}PPh_2)]$ and $[HIr_4(CO)_8\{Ph_2P\text{-}(CH_2)_nPPh_2\}(\mu\text{-}PPh_2)]$ ($n = 1$ and 4), **656**, 188
Synthesis and structure of the novel mixed Sb/Se and Sb/Te containing iron carbonyl clusters $[Fe_3(\mu_3\text{-}Y)(\mu_3\text{-}SbMes)(CO)_9]$ (Y = Se, Te) and $[Fe_3(\mu_3,\eta^2{:}\eta^1\text{-}SeSbMes)(\mu_3\text{-}SbMes)(CO)_{10}]$, **658**, 204
Synthesis, reaction and enantiomeric resolution of chiral clusters containing SRuNiM (M = Mo, W) core, **664**, 201
The B–I activation in *o*-carborane clusters: their fate towards B–H. Easy synthesis of $[7,10\text{-}C_2B_{10}H_{13}]^-$, **642**, 16

Cluster chemistry
Macropolyhedral boron-containing cluster chemistry: A novel triple-cluster structural motif. Isolation and characterisation of contiguous twenty-vertex $[(PPh_3)_4ClPd_4B_{16}H_{17}(PPh_3)_2]$, **657**, 262
Synthesis, reactivity and structures of ruthenium carbonyl clusters with telluride and hydride ligands, **659**, 22

Cluster complexes
Facial coordination of cyclooctatetraene to a Co_2Ni triangle in a heterometallic trinuclear cluster complex, **641**, 142
Synthesis, characterization of new Rh–Co mixed-metal clusters and reactions of clusters containing $[Rh_2Co_2C_2]$ core with 1-alkynes and/or carbon monoxide, **650**, 181

Clusters
Synthesis, characterization and theoretical studies of new heterometallic carbonyl clusters bridged by 4,4′-dipyridyl unit, **655**, 39
The activation of C–H bonds in internal alkenes and dienes by {NiCp} species formed in the reaction of nickelocene with alkali metals, **663**, 249

Cluster's isomerization
Recent studies on $RR'S\cdot C_2B_9H_{11}$ charge-compensated ligands: Crystal structures of 10-$(S(CH_3)_2)$-7,8-$C_2B_9H_{11}$ and 10-$(S(CH_2)_4)$-7,8-$C_2B_9H_{11}$, **657**, 247

Cluster's thermolisis
Recent studies on $RR'S\cdot C_2B_9H_{11}$ charge-compensated ligands: Crystal structures of 10-$(S(CH_3)_2)$-7,8-$C_2B_9H_{11}$ and 10-$(S(CH_2)_4)$-7,8-$C_2B_9H_{11}$, **657**, 247

CMPO
Synthesis of $[B_{12}H_{12}]^{2-}$ based extractants and their application for the treatment of nuclear wastes, **657**, 83

C–N bond activation
Ruthenium-catalyzed reductive cyclization of nitroarenes with trialkylamines leading to quinolines, **650**, 65

C–N bond-formation
Palladium-catalyzed C–N and C–C cross-couplings as versatile, new avenues for modifications of purine 2′-deoxynucleosides, **653**, 234

^{13}C NMR
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile, isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, **643-644**, 214

Cobaloxime η^1-allyl complexes
Reactions of cobaloxime η^1-allyl complexes with electron deficient alkenes, **656**, 217

Cobalt
A structural isomer of the $[CoFe_3(CO)_{13}]^-$ anion, **645**, 281
Cobalt and nickel complexes bearing 2,6-bis (imino) phenoxy ligands: syntheses, structures and oligomerization studies, **650**, 59
cyclo-Hexaphosphane versus *cyclo*-hexaarsane fragmentation on a sulphur-capped mixed-metal dicobalt–iron skeleton, **642**, 237
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136
Facial coordination of cyclooctatetraene to a Co_2Ni triangle in a heterometallic trinuclear cluster complex, **641**, 142
Late transition metal complexes bearing 2,9-bis(imino)-1,10-phenanthrolinyl ligands: synthesis, characterization and their ethylene activity, **658**, 62
New complexes with M–Si–O or M–Si–S linkages (M = Fe or Co), **648**, 237
Phosphorus–hydrogen bond cleavage on a Ph_2PH-substituted μ_3-thioxo dicobalt–iron cluster as a route to bridging phosphido and thiophosphine ligands, **642**, 228
Substitution reactions of $[\{Co(\eta^5\text{-}C_5H_5)\}_2\{Fe(CO)_2(PPh_3)\}(\mu_3\text{-}S)(\mu_3\text{-}CS)]$, **651**, 60
Transition metal-catalyzed oxidations of bishomoallylic alcohols, **661**, 67

Cobalt alkyne complexes
Alkaloid *N*-oxide promoted asymmetric cobalt-mediated Pauson–Khand reaction, **642**, 131

Cobalt and iron complexes
Synthesis of cobalt(II) and iron(II) complexes with the ligand bis(2-diphenylphosphinoethyl)methylamine and their catalytic action on ethylene oligomerization. X-ray crystal structure of $[CoCl_2\{CH_3N(CH_2CH_2PPh_2)_2\}]$, **645**, 127

Cobalt bis(dicarbollide)
Synthesis of functional derivatives of the $[3,3'\text{-}Co(1,2\text{-}C_2B_9H_{11})_2]^-$ anion, **649**, 1

Cobalt carbonyls
The reaction of $Co_2(CO)_8$ and $Co_4(CO)_{12}$ with the dipropargylamine $[(HC{\equiv}CCMe_2)_2NMe]$. Synthesis and crystal structure of the complex $Co_4(CO)_{10}(\mu\text{-}CO)[H_2C{=}CC(Me)_2N(Me)C(Me_2)\text{-}C(\mu_4\text{-}C)]$, **656**, 57

Cobalt complexes
(η^5-Cyclopentadienyl)[η^2-bis(*tert*-butylsulfonyl)acetylene](carbonyl)cobalt: An electrophilic reagent to yield CpCo-stabilized cyclobutadiene derivatives, **641**, 102

Cobaltocenium
The synthesis and complexation of a cobaltocenium-based redox-active cryptand containing the phenanthroline unit, **648**, 8

Cobaltol
Interaction of cyclic thiadiynes with CpCo(COD) — selectivity and reactivity, **641**, 3

Co–B compound
Synthesis, structure and possible formation pathway of a novel cobalt carbonyl compound with new type B–O bond, $Co(CO)_3(PPh_3)_2BEt_3$, and mixed metal Co–Fe–S cluster with possible nonlinear optical property, $[Et_4N][Co\text{-}Fe_2(CO)_8S(PPh_3)]$, **655**, 233

Cofacial cyclopentadienyl ring interaction
Cofacial interaction of ferrocenyl groups and metal atom motional anisotropy in [10]annulene organometallics, **658**, 210

CO-factored force field
A new method for assigning the C–O stretching bands in *cis*-disubstituted octahedral metal carbonyl complexes, **660**, 116
A new method for calculating the CO-factored force constants of pentacarbonyliron, **658**, 176

Co–Fe–S compound
Synthesis, structure and possible formation pathway of a novel cobalt carbonyl compound with new type B–O bond, $Co(CO)_3(PPh_3)_2BEt_3$, and mixed metal Co–Fe–S cluster with possible nonlinear optical property, $[Et_4N][Co\text{-}Fe_2(CO)_8S(PPh_3)]$, **655**, 233

Coherent control
Time-resolved organometallic photochemistry: Femtosecond fragmentation and adaptive control of $CpFe(CO)_2X$ (X = Cl, Br, I), **661**, 199

CO insertion
Preparations of sulfido-tricobalt clusters containing pyridyl type ligands: insertion of carbon monoxide into cobalt–carbon bond, **655**, 172

CO_2 insertion
Organoaluminum chemistry with low valent aluminum — recent developments, **646**, 4
Colloids
Hydrosilylation of alkynes catalyzed by platinum on carbon, **645**, 1
Combinatorial chemistry
C–C Cross-coupling reactions for the combinatorial synthesis of novel organic materials, **653**, 200
Combinatorial synthesis
New cascade and multiple cross-coupling reactions for the efficient construction of complex molecules, **653**, 129
Competitive reactions
Regioselective addition of secondary phosphine oxides to 3-(trialkylsilyl)- and 3-(trialkylgermyl)-2-propynals, **659**, 172
Complementary X-ray-NMR study
Structural studies of the $C_4H_8N_2Fe_2(CO)_6$ complex obtained by cyclization of acetaldazine in the presence of dodecacarbonyltriiron: investigations by X-ray diffraction and NMR of μ-1,2-(1,2-diaza-3-methylcyclopentane)diyl-bis(tricarbonyliron), **645**, 274
Complexes
Carbonyl derivatives of iron(0) from the reaction of $FeR_2(bipy)_2$ (R = Me, Et) with carbon monoxide, **662**, 137
Coordination chemistry of polymercuramacrocycles. Complexation of cyclic trimeric perfluoro-*o*-phenylenemercury with neutral oxygeneous Lewis bases, **654**, 123
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, **643-644**, 19
Synthesis and UV spectra of 8-mercaptoquinoline organosilicon derivatives and their metal halides complexes, **642**, 91
The first 2,3-dihydro-1*H*-[1,2,4] triphosphole, **650**, 198
Condensation
Reactivity of the lithium anion of the (*S*,*S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, **643-644**, 130
Conducting organic polymers
Cobaltabisdicarbollide anion $[Co(C_2B_9H_{11})_2]^-$ as doping agent on intelligent membranes for ion capture, **657**, 239
Conformation
Molecular construction based on icosahedral carboranes and aromatic *N*,*N*′-dimethylurea groups. Aromatic layered molecules and a transition metal complex, **657**, 48
Conformational analysis
Difluorenylsilane derivatives, a class of compounds exhibiting strong intra- and intermolecular C–H···π interactions. Crystal and molecular structures of bis(9-methylfluoren-9-yl)dimethylsilane and (9-methylfluoren-9-yl)(fluoren-9-yl) dimethylsilane, **659**, 95
Structural studies of the $C_4H_8N_2Fe_2(CO)_6$ complex obtained by cyclization of acetaldazine in the presence of dodecacarbonyltriiron: investigations by X-ray diffraction and NMR of μ-1,2-(1,2-diaza-3-methylcyclopentane)diyl-bis(tricarbonyliron), **645**, 274
Conjugated 1,3-diene
Adaptable coordination modes of conjugated 1,3-diene: uniqueness of *s-trans* coordination, **663**, 5
Conjugated dieneynes
A general convenient synthesis of conjugated dieneynes, **643-644**, 501
Conjugated polymers
Transition metal mediated routes to poly(arylphosphine)s: investigation of novel phosphorus containing conjugated polymers, **653**, 167
π-Conjugated system
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, **643-644**, 494
π-Conjugation
Structure–property relationships in phosphole oligomers: a theoretical insight, **643-644**, 194
Conjuncto heteroboranes
Macropolyhedral thiaboranes with unusual *arachno* subclusters—a computational investigation, **657**, 273
Consecutive reactions
Water soluble phosphines: Part XV. Syntheses of multiply functionalized and chiral phosphine ligands by Pd-catalyzed P–C and C–C coupling reactions, **645**, 14
Constrained-geometry
New optically active 'constrained-geometry' cyclopentadienyl-phosphine ligands and their metal complexes, **663**, 183
Controlled radical polymerization
Half-sandwich molybdenum(III) compounds containing diazadiene ligands and their use in the controlled radical polymerization of styrene, **663**, 269
[4 + 2]-Coordinate silicon compound
Synthesis, structure, and reactivity of disilanes containing one neutral [4 + 2]-coordinate silicon center, **643-644**, 479
Coordination
Lithium phosphonium azayldiides $R_3P{=}NLi$. Applications in organic synthesis and coordination chemistry, **646**, 94
Coordination number
A new approach to photophysical properties control of main group element π-electron compounds based on the coordination number change, **652**, 3
The coordination number–photophysical properties relationship of trianthrylphosphorus compounds: doubly locked fluorescence of anthryl groups, **646**, 277
Co-ordination polymer
A series of soluble, discrete homo and heteroleptic Ca(II) complexes of hexanuclear sulfidochloride rhenium clusters, $[Ca(X)_n(Y)_m][Re_6S_6Cl_8]$, ($n = 6$, $m = 0$, X = DMF, THF, DMSO; $n = 4$, $m = 3$, X = MeCN, Y = THF, dioxane) and the 1D co-ordination polymer $[Ca(MeCN)_3(OH_2)_2(dioxane)_2][Re_6S_6Cl_8]\cdot$(dioxane)(MeCN), **643-644**, 301
Coordination polymers
Applications of boron–nitrogen and boron–phosphorus adducts in organometallic chemistry, **652**, 11
Coordinatively unsaturated adducts
Syntheses and structures of some coordinatively saturated and unsaturated diruthenium carbonyl complexes, **658**, 117
Copolymerisation
Non-hindered ansasamarocenes, versatile catalysts for diene/olefin/polar monomer copolymerisations. What is really the active species?, **647**, 167
Copolymerization
New complexes of palladium(II) with chelating heterocyclic nitrogen ligands. Characterization and catalytic activity in CO–styrene copolymerization. Crystal structure of $[Pd(bipy)_2][BAr'_4]_2$, $Ar' = [3,5\text{-}(CF_3)_2C_6H_3]$, **664**, 77
Copper
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
From homogeneous to heterogeneous catalysis: zeolite supported metal complexes with C_2-multidentate nitrogen ligands. Application as catalysts for olefin hydrogenation and cyclopropanation reactions, **655**, 134
One pot stereoselective synthesis of chiral α,ω-diynes from bromoallenes and organobis(heterocuprates), **648**, 109
Synthesis and complexation of a new facultative tridentate S_2Te donor ligand $MeS(CH_2)_3Te(CH_2)_3SMe$: crystal structures of $[Rh(Cp^*)(S_2Te)][PF_6]_2$ and $[PtCl(S_2Te)]PF_6$, **649**, 214

Synthesis, characterization and structural studies of new heterometallic alkynyl complexes of platinum and Group 11 metals with chelating bis(diphenylphosphino)ferrocene ligand, **659**, 107
Copper complexes
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, **643-644**, 53
Copper(I)
A tetrameric copper(I) alkoxide with a π-tethered ligand: 2-allyl-6-methylphenoxocopper(I), **649**, 204
Homo coupling, disproportionation and cross coupling of alkyl groups. Role of the transition metal catalyst, **653**, 11
Copper(II) complexes
Synthesis and mesomorphic properties of new imines and copper(II) complexes, **655**, 105
Coumarin
Metal–coumarin complexes: synthesis and characterization of 7-isocyanocoumarin ligands and $Mo(CO)_4$(7-isocyanocoumarin)$_2$ complexes. X-ray crystal structure of $Mo(CO)_4$(7-isocyano-4-trifluoromethylcoumarin)$_2$, **642**, 97
Coumarins
C–C Cross-coupling reactions for the combinatorial synthesis of novel organic materials, **653**, 200
Coupling
Coupling of ferrocenyl chromium carbene complex with cyclobutenediones, **656**, 11
Scope and limitation of the nickel-catalyzed coupling reaction between lithium borates and mesylates, **653**, 91
Coupling reaction
Catalytically assisted carbon–carbon coupling reaction: a French–Japanese 'cuisine', **653**, 20
Cross-coupling reactions via organoboranes, **653**, 83
Coupling reactions
One pot stereoselective synthesis of chiral α,ω-diynes from bromoallenes and organobis(heterocuprates), **648**, 109
C-phenylated carbaboranes
Polyhedral monocarbaborane chemistry: The *closo*-$[PhCB_7H_7]^-$ and *closo*-$[PhCB_{10}H_{10}]^-$ anions: the two missing species in the *closo*-$[PhCB_nH_n]^-$ sequence, **657**, 180
Cp*iridium complexes
Cp*rhodium and iridium complexes with bisoxazolines: synthesis, fluxionality and applications as asymmetric catalysts for Diels–Alder reactions, **662**, 43
Cp ligand
Regioselective penta-addition of 1-alkenyl copper reagent to [60]fullerene. Synthesis of penta-alkenyl FCp ligand, **652**, 31
Cp*rhodium complexes
Cp*rhodium and iridium complexes with bisoxazolines: synthesis, fluxionality and applications as asymmetric catalysts for Diels–Alder reactions, **662**, 43
$Cp^*RuCl(PPh_3)_2$
Reaction of $Cp^*RuCl(PPh_3)_2$ with dioxygen and formation of a neutral complex $Cp^*RuCl(O_2)(PPh_3)$, **663**, 127
'Cp_2Ti'-containing complex
Synthesis and characterization of Cp_2Ti-containing organometallics via in situ oxidative-addition of 'Cp_2Ti' intermediate. Crystal structures of $(1\text{-}C_{10}H_7S)_2TiCp_2$, $[(\eta^5\text{-}C_5H_5)Fe(\eta^5\text{-}C_5H_4CH_2S)]_2TiCp_2$ and $[\eta^2\text{-}OC(Ph)=C(Ph)O]TiCp_2$, **648**, 119
Cross-coupling
Palladium-catalyzed cross-coupling reactions of arylboronic acids and 2-I-*p*-carborane, **657**, 267
Palladium cross-coupling reactions on solid support using a new silylated linker, **643-644**, 512
Rhodium-catalyzed coupling of sodium tetraphenylborate with acid anhydrides in the presence or absence of norbornene, **648**, 297
Cross coupling
Recent advances on the synthetic applications of the dithioacetal functionality, **653**, 209
Cross-coupling
Development of Pd–Cu catalyzed cross-coupling of terminal acetylenes with sp^2-carbon halides, **653**, 46
Preparation of 2-arylated-1,4-phenylenediamines by palladium-catalyzed cross-coupling reactions, **653**, 122
Cross coupling
The directed *ortho* metalation—cross coupling symbiosis. Regioselective methodologies for biaryls and heterobiaryls. Deployment in aromatic and heteroaromatic natural product synthesis, **653**, 150
Cross-coupling
A historical note of the Stille reaction, **653**, 50
A reminiscence and a future prospect of transition metal-catalyzed cross-coupling processes, **653**, 5
Catalytic asymmetric cross-coupling, **653**, 41
Cross-coupling reaction of organoboron compounds via base-assisted transmetalation to palladium(II) complexes, **653**, 54
Efficient and stereoselective cross-coupling with highly substituted alkenylsilanols, **653**, 98
Highly active, air-stable palladium catalysts for Kumada–Tamao–Corriu cross-coupling reaction of inactivated aryl chlorides with aryl Grignard reagents, **653**, 63
New cascade and multiple cross-coupling reactions for the efficient construction of complex molecules, **653**, 129
Palladium-catalyzed cross-coupling reaction of organic halides with Grignard reagents, organolithium compounds and heteroatom nucleophiles, **653**, 27
Synthesis of functionalized alkenes by transition metal-catalyzed carbostannylations of alkynes and dienes followed by cross-coupling reactions, **653**, 114
Cross coupling
Cross-coupling reactions for preparation of π-conjugated polymers, **653**, 195
Cross-coupling
Application of cross-coupling reactions in Merck, **653**, 279
Palladium-catalyzed C–N and C–C cross-couplings as versatile, new avenues for modifications of purine 2′-deoxynucleosides, **653**, 234
Palladium-catalyzed cross-coupling reaction of anilinium hypophosphite with alkenyl bromides and triflates: application to the synthesis of GABA analogs, **653**, 252
Cross-coupling reaction
Cross-coupling reaction of organobismuth dialkoxides with aryl bromides and iodides catalyzed by $Pd(PPh_3)_4$, **659**, 117
Cross-coupling reactions in the chemistry of silole-containing π-conjugated oligomers and polymers, **653**, 223
Discovery of the cross-coupling reaction between Grignard reagents and C(sp^2) halides catalyzed by nickel–phosphine complexes, **653**, 23
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, **643-644**, 98
Pyridylsilyl group-driven cross-coupling reactions, **653**, 105
Some applications of the Grignard cross-coupling reaction in the industrial field, **653**, 288
Syntheses with organoboranes. XIII. Synthesis of ω-(4-bromophenyl)alkanoic acids and their borylation, **657**, 129
Cross-coupling reactions
Catalytic cross-coupling reactions mediated by palladium/nucleophilic carbene systems, **653**, 69
Cross-coupling reactions with boronic acids in water catalysed by oxime-derived palladacycles, **663**, 46
Cross-link
Pyrolysis of poly[2,4,6-tri(methylamino)borazine] and its conversion into BN fibers, **657**, 91

(crotyl)Fp
The synthesis of a hydroazulen-2-one skeleton-determination of the diastereoselectivity of [3+2] cycloaddition of tricarbonyl[(4,5,6,7-η)-2-methyltropone]iron with *E*/*Z*-η¹-(crotyl)Fp, **659**, 43
15-Crown-5
Cyclopentadienyl, indenyl, and fluorenyl complexes of sodium with 15-crown-5, **649**, 50
Crown ether
Ytterbium(II) amides and crown ethers: addition versus amide substitution, **647**, 198
Crystal and molecular structures
C–Br versus C–H bond activation in palladium(II) cyclopalladated compounds. Crystal and molecular structure of [Pd{$C_6H_4C(H)$=NCy}(MeCOCHCOMe)], **663**, 239
Crystal engineering
The use of Kitaigorodskii's *Aufbau* principle in the solid-state study of crystalline borane compounds. A preliminary account, **657**, 20
Crystallization
Pyrolysis of poly[2,4,6-tri(methylamino)borazine] and its conversion into BN fibers, **657**, 91
Crystal structure
Alkyne oligomerization catalyzed by molybdenum(0) complexes, **649**, 173
Angular (*cis*-stilbazole) geometry in octahedral dimethyldihalidoplatinum(IV) complexes: potential as metallomesogens and X-ray structure of [$PtMe_2I_2(NC_5H_4CH$=$CHC_6H_4OC_7H_{15})_2$], **645**, 206
A tetrameric copper(I) alkoxide with a π-tethered ligand: 2-allyl-6-methylphenoxocopper(I), **649**, 204
Facile syntheses of new multidentate (phosphino)amines: X-ray structure of 1,4-{$(OC)_4Mo(Ph_2P)_2NCH_2\}_2C_6H_4$, **664**, 294
Octakis[(2,2,6,6-tetramethylpiperidino)methyl]octasilsesquioxane: synthesis and crystal structure analysis of a new aminoorganyl-functionalized octasilsesquioxane, **646**, 200
Osmacycles containing the $\{(Ph_2PE)_2N\}^-$ ligand (E = S or Se): synthesis and crystal structures, **664**, 85
Reaction of ketenylidenetriphenylphosphorane, Ph_3PC=C=O, with water: formation of methyltriphenylphosphonium hydrogencarbonate, **642**, 64
Reactions of bulky alkyl lithium reagents with a phosphaalkyne (P≡CBu′): synthesis and structural characterisation of a mixed valent phosphorus cage compound, $P^{III}\{\mu\text{-}C(H)(Bu')\}_2\{\mu\text{-}C(H)(SiMe_3)Si(Me)_2C(H)_2\}P^{V}$=$C(SiMe_3)_2$, and a phosphaalkenyl-substituted η³-azaallyl-lithium complex, [Li(tmeda){$C(SiMe_3)$(2-NC_5H_3Me-6)[P=C(Bu′)($SiMe_3$)]}], **645**, 256
Reactivity of osmium–rhodium mixed-metal cluster [$Os_3Rh(\mu\text{-}H)_3(CO)_{12}$] towards vinyl containing ligands, **659**, 151
Synthesis and characterization of planarly chiral nonbridged bis(1-*R*-indenyl) zirconium dichloride complexes and X-ray structure of *rac*-[(η⁵-C_9H_6-1-$C(CH_3)_2$-*o*-C_6H_4-$OCH_3)_2ZrCl_2$]·THF, **650**, 114
Synthesis and crystal structure of one carbon-atom bridged lutetium complex [Ph_2C(Flu)(Cp)]LuN($TMS)_2$ and catalytic activity for polymerization of polar monomers, **645**, 82
Synthesis and reactions of the cationic seven-coordinate complexes, [MoI(CO)$_3$(NCR){$Ph_2P(CH_2)_nPPh_2$}][BF_4] (R = Me, *n* = 1, 2 and 3; R = Et, *n* = 1). Crystal structures of [$MoI_2(CO)_2(PPh_3)$-{$Ph_2P(CH_2)PPh_2$}], [$MoI(CO)_2\{Ph_2P(CH_2)PPh_2\}_2$][$BF_4$]·$CH_2Cl_2$, [$MoCl_3O\{Ph_2PO(CH_2)OPPh_2\}$] and [$Mo_3(\mu_3\text{-}I)_2\{\mu_2\text{-}Ph_2P(CH_2)PPh_2\}_3$]I, **664**, 45
Synthesis and structural behavior of the P-functional organotin chlorides $[Ph_2P(CH_2)_3]_2SnCl_2$, $Ph_2P(CH_2)_3SnCl_2Me$, and $Ph_2P(CH_2)_nSnCl_3$ (*n* = 2, 3), **650**, 25
Synthesis, characterization of homoleptic lanthanide amidinate complexes and their catalytic activity for the ring-opening polymerization of ε-caprolactone, **662**, 144
Synthesis, characterization of new Rh–Co mixed-metal clusters and reactions of clusters containing [$Rh_2Co_2C_2$] core with 1-alkynes and/or carbon monoxide, **650**, 181
Synthesis of a novel copper(II) complex and its crystal structure, **650**, 274
Synthesis, reaction and enantiomeric resolution of chiral clusters containing SRuNiM (M = Mo, W) core, **664**, 201
The reaction of $Co_2(CO)_8$ and $Co_4(CO)_{12}$ with the dipropargylamine [$(HC$≡$CCMe_2)_2$NMe]. Synthesis and crystal structure of the complex $Co_4(CO)_{10}(\mu\text{-}CO)[H_2C$=$CC(Me)_2N(Me)C(Me_2)C\text{-}(\mu_4\text{-}C)]$, **656**, 57
Crystal structures
Acetonitrile activation in di-iron μ-carbyne complexes: synthesis and structure of the cyanomethyl complex [$Fe_2(\mu\text{-}CNMe_2)(\mu\text{-}CO)(CO)(CH_2CN)(Cp)_2$], **649**, 64
Addition reactions of bis(trimethylsilyl)methyl- and 1-azzallyllithium with cyanoamines into triazines or β-diketiminatolithium compounds, **655**, 89
A new class of linked-bis(*N*,*N*′-dialkylamidinate) ligand: applications in the synthesis of bimetallic aluminium complexes, **662**, 178
A series of soluble, discrete homo and heteroleptic Ca(II) complexes of hexanuclear sulfidochloride rhenium clusters, $[Ca(X)_n(Y)_m][Re_6S_6Cl_8]$, (*n* = 6, *m* = 0, X = DMF, THF, DMSO; *n* = 4, *m* = 3, X = MeCN, Y = THF, dioxane) and the 1D co-ordination polymer $[Ca(MeCN)_3(OH_2)_2(dioxane)_2][Re_6S_6Cl_8]\cdot$(dioxane)(MeCN), **643-644**, 301
Bis(2-*N*,*N*′-methylpiperazinoindenyl)zirconium dichloride. Crystal structure of bis(2-*N*,*N*′-methylpiperazinoindenyl)$ZrCl_2$, **659**, 64
Carbonyl substitution chemistry of neutral and cationic triruthenium cluster complexes derived from 1,1-dimethylhydrazine. Incorporation of two and three phosphane ligands, **663**, 227
Chiral organometallic chromophores for nonlinear optics derived from $[Fe_2(\eta^5\text{-}C_5H_5)_2(CO)_2(\mu\text{-}CO)(\mu\text{-}C\text{–}CH_3)]^+$ $[BF_4]^-$, **655**, 70
Chiral sulfur diphosphazanes derived from S-$(Ph_2P)_2N(CHMePh)$ and its rhodium(I), (III) and iridium(III) complexes. Crystal structures of $Ph_2P(S)N(CHMePh)PPh_2$, $\{Ph_2P(S)\}_2N(CHMe-Ph)$ and [(Cp*)MCl{η²-P,S-$Ph_2PNHP(S)Ph_2$}]BF_4, Cp* = η⁵-C_5Me_5; M = Rh, Ir, **651**, 90
Cobalt and nickel complexes bearing 2,6-bis (imino) phenoxy ligands: syntheses, structures and oligomerization studies, **650**, 59
Coordination chemistry of tin: Part III. The crystal structure and thermal behavior of dipotassium dimethyl-tetrafluoro-stannate dihydrate, $K_2[(CH_3)_2SnF_4]\cdot 2H_2O$, **649**, 147
3,3-Dimethyl-1-butyne complexes of tungsten(II). Crystal structures of $[WI_2(CO)(NCPh)(\eta^2\text{-}HC_2Bu')_2]$ and $[WI_2(CO)\{P(OR)_3\}_2(\eta^2\text{-}HC_2Bu')]$ (R = Me and Et), **658**, 77
Dimethylplatinum(II) and tetramethylplatinum(IV) complexes of 1-methyl-(2-alkylthiomethyl)-1*H*-benzimidazoles: experimental and DFT-calculated structures and NMR spectra, **655**, 218
Ferrocenyl hydroxymethylphosphines $(\eta^5\text{-}C_5H_5)Fe[\eta^5\text{-}C_5H_4P(CH_2OH)_2]$ and 1,1′-$[Fe\{\eta^5\text{-}C_5H_4P(CH_2OH)_2\}_2]$ and their chalcogenide derivatives, **658**, 181
Four- five- and six-co-ordinated pentafluorophenylthallium(III) complexes. Crystal structures of $[Tl(C_6F_5)_3(OPPh_3)]$, $[Tl(C_6F_5)_2Cl(OPPh_3)]_2$ and $[Tl(C_6F_5)_2(OdppmO)_2][Tl(C_6F_5)_2Cl_2]$, **663**, 289
Isolation and structural characterisation of two sterically crowded diphosphanes, **656**, 43
Late transition metal complexes bearing 2,9-bis(imino)-1,10-phenanthrolinyl ligands: synthesis, characterization and their ethylene activity, **658**, 62

New insights into the reactivity of the tantalocene hydride Cp'_2TaH_3 ($Cp' = \eta^5$-$^tBuC_5H_4$). Synthesis and characterisation of cationic Ta(V) complexes with 0,0 and *S*,*N* chelating ligands, **656**, 139

New synthetic approach and structural characterization of the chloroalkylstannanes $(Cl-CH_2)_n\ SnCl_{4-n}$ ($n = 2$, 4) and the hydrolysis product $[(ClCH_2)_2Sn(Cl)-O-Sn(Cl)(CH_2Cl)_2]_2$, **646**, 138

Nitrile exchange reactions of $[WI(CO)(NCMe)\{P(O^iPr)_3\}_2(\eta^2$-$MeC_2Me)][BPh_4]$; X-ray crystal structures of $[WI(CO)(L)\{P(O^iPr)_3\}_2(\eta^2$-$MeC_2Me)][BPh_4]$ {L = NC^iPr, NC^tBu, $NCCH_2Ph$, 1,2-$C_6H_4(NCCH_2)_2$}, **664**, 37

Organotin(IV) derivatives of novel β-diketones: Part V. Synthesis and characterization of di- and triorganotin(IV) derivatives of 4-acyl-5-pyrazolones modified in position 3 of the pyrazole. Crystal structure of (1,3-diphenyl-4-benzoyl-pyrazolon-5-ato)triphenyltin(IV), **645**, 134

Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, **643-644**, 4

Pd(II) bromide complexes of 1,2-bis(diphenylphosphino)-1,2-dicarba-*closo*-dodecaborane. Crystal structures of $[PdBr_2(1,2$-$(PPh_2)_2$-$1,2$-$C_2B_{10}H_{10})]\cdot CH_2Cl_2$, $[PdBr_{1.133}Cl_{0.867}(1,2$-$(PPh_2)_2$-$1,2$-$C_2B_{10}H_{10})]\cdot CH_2Cl_2$ and $[PdBrCl_{0.541}Me_{0.459}(1,2$-$(PPh_2)_2$-$1,2$-$C_2B_{10}H_{10})]\cdot CHCl_3$, **657**, 187

Preparation, characterization and properties of dipolar 1,2-*N*,*N*-dimethylaminomethylferrocenylsilanes, **654**, 187

Reactions of *cyclo*-(t-Bu_4Sb_4) with alkali metals; syntheses and crystal structures of $[M(L)_n(t$-$Bu_4Sb_3)]$ (M = Na, K; $n = 1$, 2) and $[K(L)(t$-$Bu_3Sb_2)]$ ($L = (Me_2NCH_2CH_2)_2NMe$), **660**, 167

Reactivity studies of monoacetylide species towards chalcogen-bridged mixed-metal clusters: Synthesis and characterisation of $[(\eta^5$-$C_5H_5)_2Fe_2RuM_2(CO)_6(\mu_3$-$E)_2\{\mu_4$-$CC(Ph)C(Ph)C\}]$ (M = Mo, W; E = S, Se) and $[(\eta^5$-$C_5H_5)_2Fe_2Ru_2M_2(CO)_9(\mu_3$-$E)_2\{\mu$-$CCPh\}_2]$ (M = W, E = S, Se), **659**, 196

Regioselective activation of C–H bonds of naphthyl imines at platinum(II). Crystal structures of $[PtMe\{1$-$(2'$-$ClC_6H_4CH_2NCH)C_{10}H_6\}PPh_3]$ and $[PtMe\{2$-$(2'$-$ClC_6H_4CH_2NCH)C_{10}H_6\}PPh_3]$, **642**, 171

8-Sila-4-stanna-*s*-tetrahydroindacenes as synthons for Me_2Si-bridged zirconocenes: formation from biscyclopentadienyl silanes by reaction with aminostannanes, **660**, 85

Solid-state structures of persubstituted titanocene chlorides bridged with long aliphatic *ansa*-chains, **642**, 148

Steric isomerization of alkyne–dialkyltungsten complexes with a chelating diaryloxo ligand: crystal structures of C_s- and C_1-$W(\eta^2$-$RC{\equiv}CR)[2,2'$-$S(4$-Me-6-$R'C_6H_2O)_2](CH_2SiMe_3)_2$, **664**, 234

Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)tetrathiafulvalenes, **643-644**, 292

Structural and spectroscopic studies of carbene and N-donor ligand complexes of Group 13 hydrides and halides, **656**, 203

Study of the *o*-carboranyl fragment as an uncommon substituent. Crystal structures of $[PdClMe(1,2$-$(PPh_2)_2$-$1,2$-$C_2B_{10}H_{10})]\cdot CH_2Cl_2$ and $[PdClMe(1,2$-$(P^iPr_2)_2$-$1,2$-$C_2B_{10}H_{10})]$, **645**, 39

Syntheses and crystal structures of bis(tetrahydrofurfurylindenyl) lanthanocene chlorides $(C_4H_7OCH_2C_9H_6)_2LnCl$ (Ln = Nd, Sm, Dy, Ho, Er, Yb), **658**, 153

Syntheses and properties of some *exo*,*exo*-bis(isodicyclopentadienyl)titanium low-valent complexes, **656**, 81

Syntheses and structures of monoplatinum model complexes for diplatinum polyynediyl adducts $L_nPt(C{\equiv}C)_zPtL_n$, **641**, 53

Synthesis and characterization of Cp_2Ti-containing organometallics via in situ oxidative-addition of 'Cp_2Ti' intermediate. Crystal structures of $(1$-$C_{10}H_7S)_2TiCp_2$, $[(\eta^5$-$C_5H_5)Fe(\eta^5$-$C_5H_4CH_2S)]_2TiCp_2$ and $[\eta^2$-$OC(Ph){=}C(Ph)O]TiCp_2$, **648**, 119

Synthesis and characterization of Group 6 transition-metal [70]fullerene derivatives containing dppb ligands. Crystal structure of *fac*-$Mo(CO)_3(dppb)(CH_3CN)$, **662**, 51

Synthesis and crystal structures of μ-1,3-bis(η^5-tetramethylcyclopentadienyl)-1,1,3,3-tetramethyldisiloxane)[η^2-bis(trimethylsilyl)ethyne]titanium(II) and a doubly tucked-in product of its thermolysis, **658**, 235

Synthesis and crystal structures of new complexes of di- and tribenzyltin *N*-ethyl and *N*-benzyl-2-amino cyclopent-1-ene-1-carbodithioates, **645**, 105

Synthesis and molecular structure of the nitride $(L_{OEt})Mo(N)Cl_2$ [$L_{OEt} = (\eta$-$C_5H_5)Co\{P(O)(OEt)_2\}_3$], **662**, 59

Synthesis and reactivity of $Al(Et)q'_2$ (q' = 2-methyl-8-quinolinolato) and crystal structures of $[Al(Et)_2q]_2$ and Alq'_2q (q = 8-quinolinolato), **654**, 229

Synthesis, characterization and structural studies of new heterometallic alkynyl complexes of platinum and Group 11 metals with chelating bis(diphenylphosphino)ferrocene ligand, **659**, 107

Synthesis, characterization and theoretical studies of new heterometallic carbonyl clusters bridged by 4,4'-dipyridyl unit, **655**, 39

Synthesis, characterization and X-ray structures of bis(arytelluro)ethynes, **654**, 91

Synthesis, microbiological study and X-ray structural characterisation of a tri-*n*-butylstannyl-2[4(diethylamino)arylazo]benzenecarboxylate, **645**, 33

Synthesis, molecular structure and biological activity of bromobenzylgermatranes, **659**, 165

Synthesis of functional derivatives of the $[3,3'$-$Co(1,2$-$C_2B_9H_{11})_2]^-$ anion, **649**, 1

Synthesis of Group 10 polyfluorothiolate mono- and bi-nuclear complexes. Crystal structures of $[Ni(SC_6HF_4)_2(dppe)]$, $[(dppe)Ni(\mu$-$SC_6HF_4)_2Pd(C_6F_5)_2]$ and $[(dppe)Ni(\mu$-$SC_6F_5)_2Pd(C_6F_5)_2]$, **663**, 98

Synthesis of novel chiral bis(ferrocenyl) ligands and their use as voltammetric metal cation sensors, **656**, 211

Synthesis, spectroscopic and structural aspects of some tetraorganodistannoxanes with internally functionalized oxime. 2. Crystal and molecular structure of $[\{Me_2Sn(ON{=}C(Me)C_5H_4$-$N)\}_2O]_2\cdot 2[2$-$NC_5H_4(Me)C{=}NOH]$, **664**, 66

Synthesis, structure and reactivity of *tert*-butyldimethylsilylcyclopentadienyl lanthanide chlorides, including crystal structures of $[(C_5H_4SiMe_2Bu^t)_2Gd(\mu$-$Cl)]_2$ and $(C_5H_4SiMe_2Bu^t)_2Er(SBT)(THF)$, **655**, 120

Tetrakis[lithium-*tert*-butyl(di-*tert*-butylfluorosilyl)amide]-dilithium oxide, $(^tBu_2SiF-NLi^tBu)_4Li_2O$—a Li_6O^{4+}-cluster, **646**, 134

Crystal structures of

Difluorenylsilane derivatives, a class of compounds exhibiting strong intra- and intermolecular C–H···π interactions. Crystal and molecular structures of bis(9-methylfluoren-9-yl)dimethylsilane and (9-methylfluoren-9-yl)(fluoren-9-yl) dimethylsilane, **659**, 95

C-substituted carbaboranes

Polyhedral monocarbaborane chemistry: The *closo*-$[PhCB_7H_7]^-$ and *closo*-$[PhCB_{10}H_{10}]^-$ anions: the two missing species in the *closo*-$[PhCB_nH_n]^-$ sequence, **657**, 180

C_2 symmetry ligands

Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, **643-644**, 424

Cumulenes

Iridium-containing cumulenes: how to prepare and how to use, **661**, 137

Cumulenic versus polyynyl/carbyne valence structure

Carbon chain bridged metals: a theoretical approach. Odd chains, **656**, 156

Cyanamide

Dehydrocoupling of tris(hydridosilylethyl)boranes and cyanamide:

a novel access to boron-containing polysilylcarbodiimides, **659**, 29
Cyanoacrylates
Synthesis and biological activity of novel cyanoacrylates containing ferrocenyl moiety, **655**, 182
Cyanohydrin
Defining effective chiral binding sites at lanthanides—highly enantioselective reagents and catalysts from binaphtholate and pybox ligands, **647**, 151
Cyanostannylation
Platinum complex catalyzed reaction of tributyltin cyanide with alkynes, **660**, 173
Cyclic dinuclear structures
Structures of $Pt_2(CH_3)_4(S(CH_3)_2)_2$ and $[PtPh_2(S(CH_3)_2)]_n$ ($n = 2$, 3), **648**, 302
Cyclic imides
Conversion of alkynes to cyclic imides and anhydrides using reactive iron carbonyls prepared from $Fe(CO)_5$ and $Fe_3(CO)_{12}$, **649**, 209
Cyclic olefins
Allenylidene-ruthenium-arene precatalyst for ring opening metathesis polymerisation (ROMP), **663**, 235
Cyclic phosphite systems
Photo-Arbuzov rearrangements of cyclic phosphite systems, **646**, 239
Cyclic siloxane
Silane-induced ring-opening polymerization of 1,1,3,3-tetramethyl-2-oxa-1,3-disilacyclopentane catalyzed by a triruthenium cluster, **660**, 145
Cyclic trinuclear structures
Structures of $Pt_2(CH_3)_4(S(CH_3)_2)_2$ and $[PtPh_2(S(CH_3)_2)]_n$ ($n = 2$, 3), **648**, 302
Cyclic voltammetry
Bimetallic nickel complexes with bridging dithiolato Schiff base ligands: synthesis, mass spectral characterisation and electrochemistry, **656**, 262
C_2-Bridged sandwich and half-sandwich entities with Ti(IV) and Cr(0) centers, **641**, 62
C–C Cross-coupling reactions for the combinatorial synthesis of novel organic materials, **653**, 200
Lithiation of ferrocenylamines and vanadium dinitrogen chemistry, **664**, 245
Preparation and characterization of substituted pentaarylcyclopentadienyliron dicarbonyl bromide complexes containing methyl or fluorine substituents on the arene rings, **656**, 146
Strain in organometallics: synthesis of rhodium and iridium complexes with a novel rigid tetrachelating phosphine olefin ligand and their redox properties, **641**, 227
Synthesis and characterization of Cp_2Ti-containing organometallics via in situ oxidative-addition of 'Cp_2Ti' intermediate. Crystal structures of $(1\text{-}C_{10}H_7S)_2TiCp_2$, $[(\eta^5\text{-}C_5H_5)Fe(\eta^5\text{-}C_5H_4CH_2S)]_2TiCp_2$ and $[\eta^2\text{-}OC(Ph)=C(Ph)O]TiCp_2$, **648**, 119
Synthesis and cyclic voltammetry of 1,2,3-trisubstituted bis(cyclopentadienyl)zirconium dichlorides, **658**, 242
Synthesis and electrochemical behaviour of σ,η^2-acetylide-bridged early–late complexes;: The solid-state structure of $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ti(C{\equiv}CSiMe_3)_2]Pd(PPh_3)$, **664**, 123
Cyclization
(η^5-Cyclopentadienyl)[η^2-bis(*tert*-butylsulfonyl)acetylene](carbonyl)cobalt: An electrophilic reagent to yield CpCo-stabilized cyclobutadiene derivatives, **641**, 102
Exploiting the versatility of organometallic cross-coupling reactions for entry into extended aromatic systems, **653**, 215
Intramolecular C–N bond formation in the reductive elimination of *ortho*-palladated arylhydrazones of acetophenone, **658**, 15
Synthesis of heterocycles by cyclization of unsaturated organolithiums: a review, **646**, 59
Synthesis of novel metallacyclic zirconocene complexes from ω-alkenyl-functionalized zirconocene dichloride complexes and their use in the α-olefin polymerization, **648**, 134
Cycloaddition
2-[(8-Dimethylaminonaphthalen-1-yl)dimethylsilyl]-*N*,*N*,4,4-tetramethyl-1,2,3,3*a*,4,5-hexahydro-4-sila-5,9*b*-ethenobenz[*e*]inde-9-amine. An unexpected by-product from the reaction of 1-lithio-8-dimethylaminonaphthalene with chlorodimethylvinylsilane, **654**, 3
New linked di-germanocenes and di-stannocenes, **651**, 44
Reactions of $Ru(C{\equiv}CPh)(L_2)Cp^*$ (L_2 = dppm, dppe) with tetracyanoethene: cycloaddition, formation of monodentate dppm and dppmO complexes and migration of CN to ruthenium, **650**, 141
The synthesis of a hydroazulen-2-one skeleton-determination of the diastereoselectivity of [3+2] cycloaddition of tricarbonyl[(4,5,6,7-η)-2-methyltropone]iron with *E*/*Z*-η^1-(crotyl)Fp, **659**, 43
[2+2] Cycloaddition
Reaction of (η^4-cycloheptatriene)$Fe(CO)_3$ with haloketenes: structure and reactivity of the cycloadducts, **648**, 164
[8+2] Cycloaddition
[8+2] Cycloaddition of 8-oxoheptafulvene with cycloheptatriene-$Fe(CO)_3$: synthesis of tricarbonyl[(2,3,4,5-η)-11-acetoxy-1*H*-cyclohept[*a*]azulene]iron, **642**, 80
Cycloaddition reaction
1,4-Diaza-1,3-diene (DAD) complexes of early transition metals. Synthesis and structural characterization of (*t*-Bu-DAD)$ZrCl(\mu\text{-}Cl)_3Zr$(*t*-Bu-DAD)(THF) and its reaction with benzophenone, **648**, 87
Cycloaddition reactions
Stereoselective addition reactions of ruthenium thioaldehyde complexes, **661**, 129
[3+2] Cycloadditions
Chiral boronates—versatile reagents in asymmetric synthesis, **657**, 136
Cycloadditions
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, **643-644**, 409
[2+2] Cycloadditions
The first stable 3,1-germaphosphaallene Tip(*t*-Bu)Ge=C=PAr, **643-644**, 202
Cyclo and spirozirconation
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, **643-644**, 324
Cycloaromatization
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, **643-644**, 342
Cyclobutadiene complexes
A simple route to (tetraethynylcyclobutadiene)cyclopentadienylcobalt, **652**, 21
(η^5-Cyclopentadienyl)[η^2-bis(*tert*-butylsulfonyl)acetylene](carbonyl)cobalt: An electrophilic reagent to yield CpCo-stabilized cyclobutadiene derivatives, **641**, 102
Cyclobutenedione
Coupling of ferrocenyl chromium carbene complex with cyclobutenediones, **656**, 11
Cyclodextrins
Synthesis and characterization of the inclusion compound of a methyltrioxorhenium(VII) adduct of 4-ferrocenylpyridine with β-cyclodextrin, **656**, 281
Cyclodimers
Retrocyclization reactions of *gem*-dibromo(ferrocenyl)cyclopropanes, **645**, 183

Cycloheptatriene
Reaction of (η^4-cycloheptatriene)$Fe(CO)_3$ with haloketenes: structure and reactivity of the cycloadducts, **648**, 164
(η^4-Cycloheptatriene)$Fe(CO)_3$
Reaction of (η^4-cycloheptatriene)$Fe(CO)_3$ with haloketenes: structure and reactivity of the cycloadducts, **648**, 164
Cycloheptatriene$Fe(CO)_3$
[8+2] Cycloaddition of 8-oxoheptafulvene with cycloheptatriene-$Fe(CO)_3$: synthesis of tricarbonyl[(2,3,4,5-η)-11-acetoxy-1*H*-cyclohept[*a*]azulene]iron, **642**, 80
Cycloheptatrienyl
Investigations on the trigonal twist process in the pseudooctahedral complexes $[MX(CO)_2(P-P)(\eta^3\text{-}R)]$ (M = Mo or W; X = halide or pseudohalide; P–P = bidentate P-donor ligand; R = cycloheptatrienyl, cyclohexenyl or cyclooctenyl), **645**, 218
cyclo-Hexaarsane
cyclo-Hexaphosphane versus *cyclo*-hexaarsane fragmentation on a sulphur-capped mixed-metal dicobalt–iron skeleton, **642**, 237
cyclo-Hexaphosphane
cyclo-Hexaphosphane versus *cyclo*-hexaarsane fragmentation on a sulphur-capped mixed-metal dicobalt–iron skeleton, **642**, 237
Cyclomanganates
Reactions of cyclomanganated complexes with carbon disulfide: routes to η^2-aryldithiocarboxylate-$Mn(CO)_4$ complexes and to the trithiocarbonate complex $(\mu_3\text{-}CS_3)_2Mn_4(CO)_{16}$, **664**, 288
Cyclometallation
A role for free phosphinidenes in the reaction of magnesium and sterically encumbered $ArPCl_2$ in solution at room temperature, **646**, 255
CH and PC bond activations of PMe_2Ph ligands by an octahedral Ru_6 cluster, **651**, 124
Coupling reactions of manganese(I) cyclometallated compounds derived from heterocyclic N-donor ligands with alkynes, **656**, 270
Cyclometallated compounds of Pd(II): C=N to C=O conversion through acid hydrolysis. Crystal and molecular structures of $[Pd\{4\text{-}(CHO)C_6H_3C(H)=NCy\}(Cl)(PPh_3)_2]$ and $[Pd\{2,4\text{-}(CHO)_2C_6H_3\}(Cl)(PPh_3)_2]$, **659**, 67
Cyclopalladated compounds with a bidentate [C, N]/terdentate [C, N, S] benzylidenethiophene imine ligand. Crystal and molecular structures of $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H)=NCH_2(C_4H_3S)\}(\mu\text{-}OAc)]_2$, $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H)=NCH_2(C_4H_3S)\}\text{-}(Cl)\cdot(P\text{-}Ph_3)]$ and $[\{Pd[2,3\text{-}(MeO)_2C_6H_2C(H)=NCH_2(C_4H_3S)](Cl)\}_2(\mu\text{-}Ph_2P(CH_2)_4PPh_2)]$, **654**, 162
Cyclopalladation of Schiff bases from phenylalanine and 2-phenylglicine, **663**, 277
Heterodimetallic palladium(II) compounds containing terdentate $[Csp^2(ferrocene),N,N']^-$ ferrocenyl ligands, **651**, 105
5-Methylquinoxaline as a versatile mono-, bi- and tridentate ligand in Palladium(II) chemistry. Crystal structures of *trans*-$[Pd(OAc)_2(N1\text{-}C_8H_5N_2Me\text{-}5)_2]$ and $[Pd(OAc)(C,N4\text{-}CH_2C_8H_5N_2\text{-}5)(PPh_3)]$, **648**, 62
Polynuclear cyclometallated palladium(II) complexes. Crystal and molecular structures of $[(PPh_3)(Cl)PdN(Cy)=C(H)C_6H_2C(H)=N(Cy)\ Pd(Cl)(PPh_3)]$ and $[\{PdN(Cy)=C(H)C_6H_2C(H)=N(Cy)\text{-}Pd\}\{Ph_2PC(H)=C(H)PPh_2\text{-}P,P\}_2][ClO_4]_2$, **655**, 127
Regioselective activation of C–H bonds of naphthyl imines at platinum(II). Crystal structures of $[PtMe\{1\text{-}(2'\text{-}ClC_6H_4CH_2N\text{-}CH)C_{10}H_6\}PPh_3]$ and $[PtMe\{2\text{-}(2'\text{-}ClC_6H_4CH_2NCH)C_{10}H_6\}\text{-}PPh_3]$, **642**, 171
Cycloocta-1,5-diene
η^1-Alkynylplatinum(II) complexes with cycloocta-1,5-diene and tri(1-cyclohepta-2,4,6-trienyl)phosphane ligands, **641**, 173
Cyclooctadienyl complex
Synthesis, spectroscopy, and structural characterization of carbonyl and cage phosphite adducts of edge-bridged open metallocenes, **655**, 158
Cyclooctatetraene
Synthesis of mixed phospholyl/cyclooctatetraenyl–lanthanide complexes. Crystal and molecular structure of (cyclooctatetraenyl)[3,4-dimethyl-2,5-bis(trimethylsilyl)-phospholyl](tetrahydrofuran)neodymium, **647**, 139
Cyclooctatetraenyl
The first mixed cyclooctatetraenyl-phospholyl metal complexes. Crystal structure of $[U(\eta\text{-}C_8H_8)(\eta\text{-}C_4Me_4P)(BH_4)(OC_4H_8)]$, **643-644**, 209
Cyclooctene
Substitution kinetics of $Cr(CO)_5(\eta^2\text{-}Z\text{-cyclooctene})$ with tetracyanoethylene, **658**, 274
Cyclopalladated
Doubly cyclopalladated pyridazines: chiral liquid crystals, **645**, 246
Synthesis, characterization and reactivity of palladium(II) compounds containing terdentate $[Csp^2, N, S]^-$ or $[Csp^3, N, S]^-$ ligands, **650**, 258
Cyclopalladated azobenzenes
Dimeric cyclopalladated azobenzenes: structural differences between 2-hydroxypyridine and 2-mercaptopyridine bridged complexes, **650**, 202
Cyclopalladated complex
Cyclopalladated complexes of tertiary arylamines as highly efficient catalysts using in the Heck reactions, **651**, 146
Cyclopalladation
Hydroxyferrocene as a prochiral analog of phenols: cyclopalladation of a mixed phosphite ester of hydroxyferrocene, **642**, 236
Regioselective palladation of 2-oxazolinyl-[2.2]paracyclophanes. Synthesis of planar-chiral phosphines, **662**, 23
Cyclopentaanulation
The synthesis of a hydroazulen-2-one skeleton-determination of the diastereoselectivity of [3+2] cycloaddition of tricarbonyl[(4,5,6,7-η)-2-methyltropone]iron with *E*/*Z*-η^1-(crotyl)Fp, **659**, 43
Cyclopentadiene
Regioselective penta-addition of 1-alkenyl copper reagent to [60]fullerene. Synthesis of penta-alkenyl FCp ligand, **652**, 31
Synthesis and cyclic voltammetry of 1,2,3-trisubstituted bis(cyclopentadienyl)zirconium dichlorides, **658**, 242
Cyclopentadienes
Cp^*GaCl_2 and Cp^*_2GaCl ($Cp^* = \eta^1\text{-}C_5Me_5$) as starting materials for novel Group 13 element complexes, **646**, 247
Cyclopentadienide
The bent metallocene geometries of potassium polyalkyl cyclopentadienyl THF solvates: monosolvated $[(THF)K(\mu\text{-}C_5Me_5)]_n$, disolvated $[(THF)_2K(\mu\text{-}C_5Me_5)]_n$ and the tethered olefin complex $[(THF)K(\mu\text{-}C_5Me_4SiMe_2CH_2CH=CH_2)]_n$, **649**, 252
The synthesis and characterization of 1-formyl-2-acylcyclopentadienylthallium compounds, **642**, 268
Cyclopentadienyl
Bis(pentafluorophenyl)mercury—a versatile synthon in organo-, organooxo-, and organoamido-lanthanoid chemistry, **647**, 50
Cyclopentadienyl complexes of yttrium and the lanthanides with bis(phosphinimino)methanides, **647**, 123
Cyclopentadienyl, indenyl, and fluorenyl complexes of sodium with 15-crown-5, **649**, 50
Half-sandwich molybdenum(III) compounds containing diazadiene ligands and their use in the controlled radical polymerization of styrene, **663**, 269
Mixed-metal cluster chemistry: Part 20. Syntheses, crystal structures and electrochemical studies of $W_2Ir_2(\mu\text{-}L)(CO)_8(\eta^5\text{-}C_5H_4Me)_2$ (L = dppe, dppf), **650**, 133
Mono-indenyl and cyclopentadienyl derivatives of molybdenum(IV) with a 16 valence-electron configuration, **663**, 78
The activation of C–H bonds in internal alkenes and dienes by {NiCp} species formed in the reaction of nickelocene with alkali metals, **663**, 249

Vibrational spectroscopic and force field studies of (η^5-Cp)ML_3-type complexes (M = Mn, Re; L = CO, O), **642**, 246
Cyclopentadienyl-amido
Hydrazonide titanium derivatives: Synthesis, characterization and catalytic activity in olefin polymerization. Molecular structure of [Ti(η^5-$C_5H_4SiMe_3$)Cl(μ-N_2CPh_2)]$_2$, **663**, 173
Cyclopentadienyl complexes
Preparation and properties of dinuclear bis[dicarbonyl(cyclopentadienyl)]diiron(II) complexes with S–S coupled, dimerized sulfur-rich dithiolate ligands, **645**, 94
Cyclopentadienyl compounds
Synthesis and reactivity of Group 14 substituted amino-functionalised cyclopentadienyl compounds, **656**, 49
Cyclopentadienyl–iron complex
Organodiiron(II)-complexes containing a long conjugated hydrazonato spacer. Synthesis, characterization, electrochemical and structural studies, **660**, 71
Cyclopentadienyl iron complexes
Alkynethiolate ligands in the syntheses of iron carbonyl derivatives. Crystal structure of [(η^5-C_5H_5)Fe(CO)$_2$(SC≡CSiMe$_3$)], **649**, 21
Cyclopentadienyl ligands
Arylimido niobium(V) complexes: mononuclear and dendritic derivatives, **664**, 258
Cyclopentadienyl-phosphine ligands
New optically active 'constrained-geometry' cyclopentadienyl-phosphine ligands and their metal complexes, **663**, 183
η^5:η^1-Cyclopentadienyl-phosphinite ligand
Synthesis of a new iron Lewis acid catalyst possessing a chelating cyclopentadienyldiphenylphosphinite ligand, (η^5:η^1-C_5H_4CH(Ph)OPPh$_2$), **654**, 202
Cyclopentadienyls
Aspects of non-classical organolanthanide chemistry, **647**, 71
Cyclopentanes
Chiral boronates—versatile reagents in asymmetric synthesis, **657**, 136
Cyclopentanones
A facile and diastereoselective access to substituted cyclopentanones from Fischer alkenyl carbene complexes and 1-amino-1-azadienes, **643-644**, 363
Cyclopentenedione
Coupling of ferrocenyl chromium carbene complex with cyclobutenediones, **656**, 11
Cyclopentylcyclopentadienyl
Synthesis and characterization of ($C_5H_9C_9H_6$)$_2$Yb(THF)$_2$(II) (**1**) and [($C_5H_9C_5H_4$)$_2$Yb(THF)]$_2$O$_2$ (**2**), and ring-opening polymerization of lactones with **1**, **650**, 84
Cyclopentylindenyl
Synthesis and characterization of ($C_5H_9C_9H_6$)$_2$Yb(THF)$_2$(II) (**1**) and [($C_5H_9C_5H_4$)$_2$Yb(THF)]$_2$O$_2$ (**2**), and ring-opening polymerization of lactones with **1**, **650**, 84
Cyclopolyenes
Facial coordination of cyclooctatetraene to a Co_2Ni triangle in a heterometallic trinuclear cluster complex, **641**, 142
Cyclopropanation
From homogeneous to heterogeneous catalysis: zeolite supported metal complexes with C_2-multidentate nitrogen ligands. Application as catalysts for olefin hydrogenation and cyclopropanation reactions, **655**, 134
Cyclopropanation of olefins
Catalytic transformations of diazo compounds promoted by platinum(0) and dicationic platinum(II) complexes, **642**, 32
Cyclopropane
Retrocyclization reactions of *gem*-dibromo(ferrocenyl)cyclopropanes, **645**, 183
cyclo-(t-Bu_4Sb_4)
Reactions of *cyclo*-(t-Bu_4Sb_4) with alkali metals; syntheses and crystal structures of [M(L)$_n$(t-Bu_4Sb_3)] (M = Na, K; n = 1, 2) and [K(L)(t-Bu_3Sb_2)] (L = (Me$_2$NCH$_2$CH$_2$)$_2$NMe), **660**, 167
Cyclotrimerization
Alkyne oligomerization catalyzed by molybdenum(0) complexes, **649**, 173
Cytotoxicity
Tricarbonylrhenium(I) complexes of phosphine-derivatized amines, amino acids and a model peptide: structures, solution behavior and cytotoxicity, **650**, 123

dba
Mechanism of the oxidative addition of Pd^0 complexes generated from Pd^0(dba)$_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, **643-644**, 416
Deboronation
Retention of the B(3)–X (X = Br, I) bond in *closo*-*o*-carborane derivatives after nucleophilic attack. The first synthesis of [3-X-7-R-7,8-*nido*-$C_2B_9H_{10}$]$^-$ (X = Br, I). Crystal structure of [HNMe$_3$][3-I-7,8-*nido*-$C_2B_9H_{11}$], **657**, 217
Decahydro-*closo*-decaborate(2–) anion
Dihydrogen bonding of decahydro-*closo*-decaborate(2–) and dodecahydro-*closo*-dodecaborate(2–) anions with proton donors: experimental and theoretical investigation, **657**, 155
Deconvolution
Synthesis of polysilanes bearing pendant carbosilyl groups and ^{29}Si-NMR probe on the tacticity using side chain silicon atoms, **650**, 223
Dehydrobromination
Synthesis of 2H-1,2-oxaphosphorin 2-oxides, **646**, 153
Dehydrogenation
Exploiting the versatility of organometallic cross-coupling reactions for entry into extended aromatic systems, **653**, 215
Dehydrohalogenation
3,3-Diferrocenylcyclopropene, **659**, 56
Dehydropolymerization
Synthesis of polysilanes bearing pendant carbosilyl groups and ^{29}Si-NMR probe on the tacticity using side chain silicon atoms, **650**, 223
Delocalization
Synthesis of alkaline earth metal bis(2-phosphaethynolates), **643-644**, 189
Dendrimers
Arylimido niobium(V) complexes: mononuclear and dendritic derivatives, **664**, 258
Synthesis of dendrimers with phosphine end groups at each generation, **643-644**, 112
Density functional
Density functional investigation of incorporation of functional additives to neutral salicylaldiminato Ni(II) polymerization catalyst, **654**, 132
Density functional calculations
A theoretical analysis of [M(tmtaa)] and [M(acacen)] fragments employed in the organometallic chemistry of early transition metals, **648**, 14
Carbon chain bridged metals: a theoretical approach. Odd chains, **656**, 156
Donor–acceptor interactions with electrophilic terminal phosphinidene complexes, **643-644**, 223
Density functional studies
Density functional studies on N-fused porphyrin. Electronic, magnetic and metal binding properties, **643-644**, 265
Density functional study
On the mechanism of olefin polymerisation with titanium β-diketonato complexes. A model density functional study, **648**, 126
Density functional theory
A theoretical study of linear germacyanogen isomers, **659**, 121

On the transferability of Ir–I bond enthalpies between [Ir(μ-S′Bu)(I)$_2$(CO)$_2$]$_2$ and *trans*-[Ir(X)(I)$_2$(CO)(PPh$_3$)$_2$] (X = F, Cl, Br, I) complexes, **662**, 105
Specific solvent effect on R$_2$ZrCl$_2$ (R = butyl, ethyl) reactivity, a density functional study, **664**, 268
Density functional theory computations
Macropolyhedral thiaboranes with unusual *arachno* subclusters—a computational investigation, **657**, 273
Density functional theory (DFT) calculation
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, **643-644**, 105
Density function theory
Chromium tricarbonyl complexes with biphenylene as η^6 ligand: synthesis, structure, dynamic behaviour in solid state and thermal η^6,η^6-haptotropic rearrangements. Experimental (NMR) and theoretical (DFT) studies, **656**, 27
Deoxygenation
Organolanthanides RLnX (R is alkyl, aryl, X is halogen) and lanthanide complexes with aromatic hydrocarbon dianions: synthesis, structure, and reactivity, **647**, 21
2′-Deoxynucleosides
Palladium-catalyzed C–N and C–C cross-couplings as versatile, new avenues for modifications of purine 2′-deoxynucleosides, **653**, 234
Deprotonation
Convenient preparation of Li[(η^5-C$_5$Me$_5$)M(CO)$_2$] (M = Ru, Fe) by the reaction of (η^5-C$_5$Me$_5$)M(CO)$_2$H with *n*-BuLi, **645**, 201
Synthesis and characterisation of the *exo-nido* molybdacarborane complex Mo(η-C$_3$H$_5$)(CO)$_2$(7,8-μ-SCH$_2$CH$_2$S-7,8-*nido*-C$_2$B$_9$H$_{10}$). Strong B–H–Mo 3-centre bonding, **663**, 221
Derivatization
Synthesis and derivatization of the 2-amino-*closo*-decaborate anion [2-B$_{10}$H$_9$NH$_3$]$^-$, **657**, 163
Desulfurisation
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Desymmetrisation
Symmetric and asymmetric samarium alkoxide derivatives of bridging sulfur biphenolate and binaphtholate ligands; synthetic, structural, and catalytic studies, **647**, 205
DFT
DFT studies of some structures and reactions of lanthanides complexes, **647**, 190
Theoretical study of the bonding capabilities of 1,4-diaza-1,3-butadiene and *cis*-1,3-butadiene ligands in cyclopentadienyl tantalum(V) complexes, **655**, 16
DFT analysis
Photochemical intermediates of *trans*-Rh(CO)L$_2$Cl where L = PMe$_3$, PBu$_3$, and *i*-Pr$_2$HN and *cis*-Rh(CO)$_2$(*i*-Pr$_2$HN)Cl in frozen organic glasses, **652**, 95
DFT calculation
Reactions of methyl(phenyl)silylene with CO and PH$_3$—the formation of acid–base complexes, **641**, 156
Structural characterization of Group 4 transition metal halide bis-Arduengo carbene complexes MCl$_4$L$_2$: X-ray crystal structure analyses and DFT calculations, **663**, 192
DFT-calculations
The metal–carbon bond in vinylidene, carbonyl, isocyanide and ethylene complexes, **661**, 181
DFT calculations
Coordinated olefins, H$_2$C=CHR, and phosphanes, PH$_2$R: a theoretical study of the R substituent effect, **643-644**, 285
Isolation of a stable Cr(V) intermediate in the oxidation of aryl-substituted alkenes by chromylchloride, **641**, 121
Molecular structures of trimeric diphenyltin chalcogenides, (Ph$_2$SnE)$_3$, E = S, Se, Te, **660**, 43
Syntheses and structural characterization of some mono- and di-*p*-nitrophenyl[3]ferrocenophanes: X-ray structure of [3]ferrocenophane, 3-*p*-nitrophenyl[3]ferrocenophane, and 3,4′-bis-(*p*-nitrophenyl)[3]ferrocenophane; DFT calculations on ferrocene derivatives, **649**, 161
Theoretical analysis of bis(ethylene) complexes of molybdenum and tungsten, **663**, 83
DFT-calculations, Matrix isolation
A theoretical study of the reaction products created by irradiation of the carbonyl iron silyl complexes Cp(CO)$_2$FeSiH$_2$Me and Cp(CO)$_2$FeCH$_2$SiH$_3$, **648**, 155
Dialkyl dithiocarbamates
Synthesis and X-ray structures of hydridotris(1-pyrazolyl)borate carbonyl complexes of ruthenium, **648**, 193
Dialkyl phosphonated phosphines
X-ray crystal structures of novel platinum(II) and palladium(II) complexes of dialkyl phosphonated phosphines, **649**, 113
Dialkyltin diaryloxides
Structure of dialkyltin diaryloxides and their reactivity toward carbon dioxide and isocyanate, **659**, 133
Diamido ligands
Solution structure and decomposition pathway of zwitterionic zirconium (IV) benzyl complexes, **658**, 1
Dianionic ligands
Organolanthanides RLnX (R is alkyl, aryl, X is halogen) and lanthanide complexes with aromatic hydrocarbon dianions: synthesis, structure, and reactivity, **647**, 21
3,5-Diaryl-1,2,4-selenadiazoles
Palladium-catalyzed formation of 3,5-diaryl-1,2,4-selenadiazoles from arylselenocarboxamide, **656**, 274
Diastereomerically enriched
Enantiomerically enriched 'carbanions': Studies on the stereochemical course of selective transformations of metal alkyls, **661**, 149
Diastereomeric structures
Synthesis and X-ray structures of (biphenoxide)Ti species: four and five coordinate complexes that crystallize as mixtures of diastereomers, **663**, 70
Diastereoselectivity
Reactivity of the lithium anion of the (*S*,*S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, **643-644**, 130
Diazabutadiene
Theoretical study of the bonding capabilities of 1,4-diaza-1,3-butadiene and *cis*-1,3-butadiene ligands in cyclopentadienyl tantalum(V) complexes, **655**, 16
1,4-Diaza-1,3-diene
1,4-Diaza-1,3-diene (DAD) complexes of early transition metals. Synthesis and structural characterization of (*t*-Bu-DAD)ZrCl(μ-Cl)$_3$Zr(*t*-Bu-DAD)(THF) and its reaction with benzophenone, **648**, 87
Diazadiene ligands
Half-sandwich molybdenum(III) compounds containing diazadiene ligands and their use in the controlled radical polymerization of styrene, **663**, 269
μ-1,2-(1,2-Diaza-3-methylcyclopentane)diyl-bis(tricarbonyliron)
Structural studies of the C$_4$H$_8$N$_2$Fe$_2$(CO)$_6$ complex obtained by cyclization of acetaldazine in the presence of dodecacarbonyltriiron: investigations by X-ray diffraction and NMR of μ-1,2-(1,2-diaza-3-methylcyclopentane)diyl-bis(tricarbonyliron), **645**, 274
Diazaphospholes
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, **643-644**, 253

Diazoalkanes
Synthesis, structure and reactivity of highly functionalized arsanyl- and stibanyl-diazomethanes, **643-644**, 81
Diazo compounds
Catalytic transformations of diazo compounds promoted by platinum(0) and dicationic platinum(II) complexes, **642**, 32
New highly fluorinated dirhodium(II) tetrakis(alkanecarboxylates) as catalysts for carbenoid C–H insertion reactions, **643-644**, 174
Diazomethane
New synthetic approach and structural characterization of the chloroalkylstannanes $(Cl-CH_2)_n SnCl_{4-n}$ $(n = 2, 4)$ and the hydrolysis product $[(ClCH_2)_2Sn(Cl)-O-Sn(Cl)(CH_2Cl)_2]_2$, **646**, 138
Dibenzotetramethyltetraaza[14]annulene dianion ($[tmtaa]^{2-}$)
A theoretical analysis of [M(tmtaa)] and [M(acacen)] fragments employed in the organometallic chemistry of early transition metals, **648**, 14
Dibenzylamine
Reactivity of Me_3M (M = Al, Ga, In) with benzylamine to form the dimers, $[Me_2MN(H)CH_2Ph]_2$, and the hexamers, $[MeAlNCH_2Ph]_6$ and $[MeGaNCH_2Ph]_6$: molecular structures of *trans*-$[Me_2MN(H)CH_2Ph]_2$ and $[MeAlNCH_2Ph]_6$, **649**, 78
Diborane (4)
Rhodium(I) catalysed diboration of (*E*)-styrylboronate esters: molecular structures of (*E*)-*p*-MeO–C_6H_4–CH=CH–B(1,2-$O_2C_6H_4$) and *p*-MeO–C_6H_4–$CH_2C\{B(1,2\text{-}O_2C_6H_4)\}_3$, **652**, 77
Diboration
Rhodium(I) catalysed diboration of (*E*)-styrylboronate esters: molecular structures of (*E*)-*p*-MeO–C_6H_4–CH=CH–B(1,2-$O_2C_6H_4$) and *p*-MeO–C_6H_4–$CH_2C\{B(1,2\text{-}O_2C_6H_4)\}_3$, **652**, 77
1,1-Dibromo-1-alkene
Studies on stereoselective Sonogashira coupling of 1,1-dibromo-1-alkene, **653**, 141
Dications
Generation of $[1,2\text{-}(CH_2)_2C_5Me_3MC_5Me_4CH_2\text{-}1']^{3+}$ (M = Ru, Os) trications and determination of their structures by comparing NMR-spectra with density-functional method calculations, **645**, 87
Dichalcogenoimidodiphosphinate anions
A mixed-valence dimanganese complex synthesized from the $[Ph_2P(O)NP(O)Ph_2]^-$ anion with $[BrMn(CO)_5]$, **645**, 54
2,5-dichloro-1,4-dicyanamidobenzene
Synthetic, spectral, electrochemical and structural aspects of some Ru(II) arene complexes with some novel bridging ligands, **648**, 27
Dichloroketene
Reaction of (η^4-cycloheptatriene)$Fe(CO)_3$ with haloketenes: structure and reactivity of the cycloadducts, **648**, 164
Dicoordinate phosphorus
Phosphametallocenes: from discovery to applications, **646**, 15
1,4-dicyanamidobenzene
Synthetic, spectral, electrochemical and structural aspects of some Ru(II) arene complexes with some novel bridging ligands, **648**, 27
Diels–Alder adducts
Retrocyclization reactions of *gem*-dibromo(ferrocenyl)cyclopropanes, **645**, 183
[4+2]-Diels–Alder cycloaddition
Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, **643-644**, 136
Diene
Non-hindered ansasamarocenes, versatile catalysts for diene/olefin/polar monomer copolymerisations. What is really the active species?, **647**, 167
Diene analogues
Some recent advances in the chemistry of silicon and its homologues in low coordination states, **646**, 39
Diethylaluminum chloride
Chromium complexes coordinated with chelating disiloxane-1,3-diamido ligands as catalyst precursors for ethylene polymerization, **642**, 156
diEthyldithiophosphato ligand
Synthesis, reactivity and structures of diethyldithiophosphate molybdenum complexes: crystal structures of $[Mo\{\eta^2\text{-}S_2P(OEt_2)\}_2(PhC{\equiv}CPh)_2]$ and $[Mo(\eta^3\text{-}C_3H_5)\{\eta^1\text{-}S_2P(OEt_2)\}(Phen)(CO)_2]$, **658**, 191
Diethyleneglycol–dimethylether
Novel fluorenyl alkali metal DIGLYME complexes: synthesis and solid state structures, **656**, 89
Diethylzinc
Asymmetric addition of diethylzinc to aromatic aldehydes by chiral ferrocene-based catalysts, **649**, 258
Difluorenylsilanes
Difluorenylsilane derivatives, a class of compounds exhibiting strong intra- and intermolecular C–H···π interactions. Crystal and molecular structures of bis(9-methylfluoren-9-yl)dimethylsilane and (9-methylfluoren-9-yl)(fluoren-9-yl) dimethylsilane, **659**, 95
Dihydrogen-bonding
The use of Kitaigorodskii's *Aufbau* principle in the solid-state study of crystalline borane compounds. A preliminary account, **657**, 20
Dihydrogen complexes
A tertiary phosphine that is too bulky: preparation of catalytically less active carbene and vinylidene ruthenium(II) complexes, **641**, 203
Ruthenium hydrides bearing $SbPh_3$ and $AsPh_3$ ligands: characterization of the bis(dihydrogen) complexes $[Cp^*Ru(H_2)_2(EPh_3)]^+$ ($Cp^* = C_5Me_5$; E = Sb, As), **663**, 151
Dihydrogenphosphate
Amplification upon polymerization of the electrochemical anion sensing properties of an amidoferrocene monoreceptor molecule, **656**, 116
Dihydroxydisilanes
Dihydroxyoligosilanes as novel ligands in coordination chemistry—first synthesis of 2,5-dioxa-3,4-disilatitanacyclopentanes, **662**, 1
Diimine
The formation and polymerization behavior of Ni(II) α-diimine complexes using various aluminum activators, **645**, 158
Diimine ligands
New bis(imino)pyridine-iron(II)- and cobalt(II)-based catalysts: synthesis, characterization and activity towards polymerization of ethylene, **648**, 55
Diiron
Unusual reactions of cationic bridging carbyne complexes of dimethylsilane-bridged bis(η^5-cyclopentadienyl)diiron tricarbonyl with carbonylmetal anions, **658**, 214
1-Diisopropylaminophosphole
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, **643-644**, 19
β-Diketiminates
Aspects of non-classical organolanthanide chemistry, **647**, 71
Diketiminato complexes
Addition reactions of bis(trimethylsilyl)methyl- and 1-azzallyllithium with cyanoamines into triazines or β-diketiminatolithium compounds, **655**, 89
β-Diketiminato ligand
Synthesis and structure of monomeric and solvent-free $LPrX_2$ compounds supported by a new β-diketiminato ligand [$L = Et_2NCH_2CH_2NC(Me)CHC(Me)NCH_2CH_2NEt_2$, X = Cl, Br, BH_4], **643-644**, 47
β-Diketones
The reactivity of new (1,5-cyclooctadiene)rhodium acylpyrazolo-

nates towards N- and P-donor ligands: X-ray structures of [Rh(1,5-COD)Q^s], [Rh(1,5-COD)(phen)]$Q^s \cdot 0.5H_2O$ (HQ^s = 1-phenyl-3-methyl-4-(2-thenoyl)-pyrazol-5-one) and [Rh(1,5-COD)Br]$_2$, **651**, 5

1,2-Diketones
Non-catalyzed addition reactions of $Cl_3SiSiCl_3$ with 1,2-diketones, 1,2-quinones and with a 1,4-quinone, **651**, 15

Dilithiumorganic compounds
Polylithiumorganic compounds: Part 28. The reaction of allene and alkyl substituted allenes with lithium metal, **642**, 1

Dimeric C_S intermediate mechanism
A novel mechanism for the fluxional behaviour of [Pd(η^2-tetramethylethylenetetracarboxylate)(2-methylthiomethylpyridine)], **642**, 58

Dimerisation
Acid controlled alkyne dimerisation initiated by a Ru–carbene precursor, **659**, 159

Dimerization
Synthesis of dimetallic μ-alkylideneamido zirconocene dications by a thermodynamically favorable lithium chloride elimination pathway, **643-644**, 61

Dimetallic compound
The reactions of 4,6-dimethyl-2-mercaptopyrimidine with dimetallic compounds: diiron nonacarbonyl and cyclopentadienylmolybedenum tricarbonyl dimer, **655**, 49

Dimethylamino
Synthesis and structure of 2,4,6-tris[tris(dimethylamino)silylamino]borazine: {[$(CH_3)_2N]_3SiNH\}_3B_3N_3H_3$, **657**, 71

8-Dimethylamino-1-naphthyl group
Synthesis, structure, and reactivity of disilanes containing one neutral [4+2]-coordinate silicon center, **643-644**, 479

3,3-Dimethyl-1-butyne
3,3-Dimethyl-1-butyne complexes of tungsten(II). Crystal structures of [WI_2(CO)(NCPh)(η^2-HC_2Bu^t)$_2$] and [WI_2(CO)\{P$(OR)_3\}_2$(η^2-HC_2Bu^t)] (R = Me and Et), **658**, 77

Dimethylcyclopentenes
Zirconocene mediated cyclization and isomerization of 1,3,6-heptatriene, **663**, 13

2,5-dimethyl-1,4-dicyanamidobenzene
Synthetic, spectral, electrochemical and structural aspects of some Ru(II) arene complexes with some novel bridging ligands, **648**, 27

1,1-Dimethylhydrazine
Carbonyl substitution chemistry of neutral and cationic triruthenium cluster complexes derived from 1,1-dimethylhydrazine. Incorporation of two and three phosphane ligands, **663**, 227

Dinitrogen complexes
Preparation of dinitrogen complexes $Mo(N_2)_2P_4$ stabilised by phosphonite $PPh(OEt)_2$ and phosphinite $PPh_2(OEt)$ ligands, **660**, 55
The expansion of divalent organolanthanide reduction chemistry via new molecular divalent complexes and sterically induced reduction reactivity of trivalent complexes, **647**, 2

Dinitrogen uptake
Lithiation of ferrocenylamines and vanadium dinitrogen chemistry, **664**, 245

Dinuclear
Acetonitrile activation in di-iron μ-carbyne complexes: synthesis and structure of the cyanomethyl complex [Fe_2(μ-$CNMe_2$)(μ-CO)(CO)(CH_2CN)($Cp)_2$], **649**, 64
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Dithiocarbamate derivatives of μ-thiocarbyne complexes: synthesis and X-ray molecular structure of [Fe_2(μ-CS)(μ-CSMe)(μ-S_2CNMe_2)Cp_2], **659**, 15
Reactions of acylferrate anion [$CH_3COFe(CO)_4$]$^-$ with methyl methyl iodide and acetylenes. Synthesis of mono- and dinuclear alkenyl ketone iron complexes. X-ray structure of [NEt_4][Fe$(CO)_3(COCPh)_2$)], **642**, 107
Synthesis, structure and polymerization catalytic properties of doubly bridged bis(cyclopentadienyl) dinuclear titanium and zirconium complexes, **645**, 212

Dinuclear complexes
Dinuclear ansa zirconocene complexes containing a sandwich and a half-sandwich moiety as catalysts for the polymerization of ethylene, **658**, 259
Syntheses and structures of dimethylamino-bridged bis(silylene)ruthenium and -osmium complexes, **645**, 235

Diols
Steric effects in alkylalane dioldiates: [^{t}BuAl($OC(CH_3)_2CH_2C(CH_3)_2O$)]$_2$ a new (monoalkyl)alane *O*,*O*′-chelate complex, **651**, 72

Diop
'Diopium', a chiral phosphoniophosphine derived from Kagan's diop. Rhodium complexes and reducing catalytic properties, **654**, 180

1-(Diorganylphosphoryl)-3-[trialkylsilyl(or germyl)]-2-propyn-1-ols
Regioselective addition of secondary phosphine oxides to 3-(trialkylsilyl)- and 3-(trialkylgermyl)-2-propynals, **659**, 172

Dioxaborolane
The synthesis and redox behaviors of binuclear ruthenocene derivatives bridged by an aromatic moiety, **655**, 23

Dioxygen
Reaction of Cp*RuCl$(PPh_3)_2$ with dioxygen and formation of a neutral complex Cp*RuCl$(O_2)(PPh_3)$, **663**, 127

Diphenylmethyl
Sodium and potassium derivatives of diphenyl(trimethylsilyl)methane, **664**, 182

Diphenyl-2-pyridylphosphine
Preparations of sulfido-tricobalt clusters containing pyridyl type ligands: insertion of carbon monoxide into cobalt–carbon bond, **655**, 172

Diphosphabenzvalenes
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, **643-644**, 409

1,3-Diphosphacyclobutadienes
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, **643-644**, 409

1,3-Diphospha-Dewar-benzenes
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, **643-644**, 409

1,1′-Diphosphaferrocene
Carboxylation of 3,3′,4,4′-tetramethyl-1,1′-diphosphaferrocene with CO_2 in the presence of $AlCl_3$, **642**, 143

Diphosphene
A role for free phosphinidenes in the reaction of magnesium and sterically encumbered $ArPCl_2$ in solution at room temperature, **646**, 255

Diphosphine
Study of the *o*-carboranyl fragment as an uncommon substituent. Crystal structures of [PdClMe(1,2-$(PPh_2)_2$-1,2-$C_2B_{10}H_{10}$)]·CH_2Cl_2 and [PdClMe(1,2-$(P^iPr_2)_2$-1,2-$C_2B_{10}H_{10}$)], **645**, 39
Synthesis and spectroscopic characterisation of compounds with formula [\{$Fe_2(SPh)_2(CO)_5\}Ph_2P(CH_2)_nPPh_2$\{$Fe(CO)_4$\}] and [\{$Fe_2(SPh)_2(CO)_5\}_2Ph_2P(CH_2)_nPPh_2$] ($n$ = 3, 4 and 6), **642**, 40
Synthesis of 2,4,6-tris(trifluoromethyl)phenyl complexes of gold and thallium, **648**, 1

Diphospholes
Synthetic, structural and theoretical studies on the new 2,3-

dihydro-1,2,4-thia-, selena- and tellura-diphospholes, P_2EC_2-Bu^t_2(H)Me, (E = S, Se, Te) and their $[M(CO)_5]$ complexes (M = Cr, Mo, W), **659**, 84
Diphosphorylated carbanions
Synthesis of P-chiral enephosphonic acid derivatives, **662**, 83
1,3-Dipolar cycloaddition
1,3-Dipolar cycloaddition of alkynyliodonium salts with a nitrile oxide. Synthesis and reactivity of isoxazolyliodonium salts, **646**, 196
Dipropargylamines
The reaction of $Co_2(CO)_8$ and $Co_4(CO)_{12}$ with the dipropargylamine $[(HC{\equiv}CCMe_2)_2NMe]$. Synthesis and crystal structure of the complex $Co_4(CO)_{10}(\mu\text{-}CO)[H_2C{=}CC(Me)_2N(Me)C(Me_2)C\text{-}(\mu_4\text{-}C)]$, **656**, 57
Directed *ortho* metalation
The directed *ortho* metalation—cross coupling symbiosis. Regioselective methodologies for biaryls and heterobiaryls. Deployment in aromatic and heteroaromatic natural product synthesis, **653**, 150
Diruthenium
Synthesis, characterization and electrochemistry of diruthenium complexes linked by aryl acetylide bridges, **660**, 1
Diselenide
A novel and convenient synthesis towards 2-pyridylselenium compounds: X-ray crystal structure of 4,4′-dimethyl-2,2′-dipyridyl diselenide and tris(2-pyridylseleno)methane, **658**, 71
1,4-Disilacyclohexadiene synthesis
Synthesis of 1,4-disilacyclohexa-2,5-dienes, **649**, 276
Disilacyclopentane
Platinum- and nickel-catalyzed reactions of 1,2-dimethyl-1,2-diphenyl-1,2-disilacyclopentane with alkynes, **645**, 47
Disilane
Interactions of chloromethyldisilanes with tetrakis(dimethylamino)ethylene (TDAE), formation of $[TDAE]^{\bullet+}$ $[Si_3Me_2Cl_7]^-$, **662**, 14
Non-catalyzed addition reactions of $Cl_3SiSiCl_3$ with 1,2-diketones, 1,2-quinones and with a 1,4-quinone, **651**, 15
Synthesis, structure, and reactivity of disilanes containing one neutral [4 + 2]-coordinate silicon center, **643-644**, 479
Disilane reactions
Synthesis of 1,4-disilacyclohexa-2,5-dienes, **649**, 276
Disilanes
Hexa(1-alkynyl)disilanes. Synthesis, structure and 1,1-ethylboration, **656**, 97
Disiloxane-1,3-diamido
Chromium complexes coordinated with chelating disiloxane-1,3-diamido ligands as catalyst precursors for ethylene polymerization, **642**, 156
Disorder
Synthesis and molecular structure of the nitride $(L_{OEt})Mo(N)Cl_2$ $[L_{OEt} = (\eta\text{-}C_5H_5)Co\{P(O)(OEt)_2\}_3]$, **662**, 59
Distannoxane
Dimeric dithiocarbamates of stannolane. An example of the presence of secondary bonds in the formation of an inorganic ring. Molecular and crystal structure of 2-^{n}butyl-2-(dimethyldithiocarbamate)-1,3,2-oxathiastannolane and 2-^{n}butyl-2-(piperidyldithiocarbamate)-1,3,2-oxathiastannolane, **654**, 51
Distannoxanes
New synthetic approach and structural characterization of the chloroalkylstannanes $(Cl{-}CH_2)_n$ $SnCl_{4-n}$ ($n = 2$, 4) and the hydrolysis product $[(ClCH_2)_2Sn(Cl){-}O{-}Sn(Cl)(CH_2Cl)_2]_2$, **646**, 138
Disulphide
Synthesis and spectroscopic characterisation of compounds with formula $[\{Fe_2(SPh)_2(CO)_5\}Ph_2P(CH_2)_nPPh_2\{Fe(CO)_4\}]$ and $[\{Fe_2(SPh)_2(CO)_5\}_2Ph_2P(CH_2)_nPPh_2]$ ($n = 3$, 4 and 6), **642**, 40
Ditellurium
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
1,2-Dithia-3,4,5-triazolium
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Dithioacetal
Recent advances on the synthetic applications of the dithioacetal functionality, **653**, 209
Dithioalkoxycarbonylphosphine
Phosphorus–hydrogen bond cleavage on a Ph_2PH-substituted μ_3-thioxo dicobalt–iron cluster as a route to bridging phosphido and thiophosphine ligands, **642**, 228
Dithiocarbamate
Dimeric dithiocarbamates of stannolane. An example of the presence of secondary bonds in the formation of an inorganic ring. Molecular and crystal structure of 2-^{n}butyl-2-(dimethyldithiocarbamate)-1,3,2-oxathiastannolane and 2-^{n}butyl-2-(piperidyldithiocarbamate)-1,3,2-oxathiastannolane, **654**, 51
Dithiocarbamate derivatives of μ-thiocarbyne complexes: synthesis and X-ray molecular structure of $[Fe_2(\mu\text{-}CS)(\mu\text{-}CSMe)(\mu\text{-}S_2CNMe_2)Cp_2]$, **659**, 15
Mono-indenyl and cyclopentadienyl derivatives of molybdenum(IV) with a 16 valence-electron configuration, **663**, 78
Syntheses, X-ray structures, and reactions of ruthenium carbonyl complexes containing 1,1-dithiolates, **650**, 37
Dithiocarbene
Dithiocarbamate derivatives of μ-thiocarbyne complexes: synthesis and X-ray molecular structure of $[Fe_2(\mu\text{-}CS)(\mu\text{-}CSMe)(\mu\text{-}S_2CNMe_2)Cp_2]$, **659**, 15
Dithiocarboxylato ligands
Synthesis and crystal structures of new complexes of di- and tribenzyltin *N*-ethyl and *N*-benzyl-2-amino cyclopent-1-ene-1-carbodithioates, **645**, 105
Dithiolate complexes
Preparation and properties of dinuclear bis[dicarbonyl(cyclopentadienyl)]diiron(II) complexes with S–S coupled, dimerized sulfur-rich dithiolate ligands, **645**, 94
Dithiolato metalloligands
New half-sandwich heterobimetallic CpMPt (M = Rh, Ir) dithiolato bridged complexes. X-ray structure of $[(PPh_3)_2Pt(\mu\text{-}S(CH_2)_2S)RhCl(\eta^5\text{-}C_5H_5)]BF_4$, **662**, 188
Dithiolato Schiff base
Bimetallic nickel complexes with bridging dithiolato Schiff base ligands: synthesis, mass spectral characterisation and electrochemistry, **656**, 262
Dithiophosphate
Mono-indenyl and cyclopentadienyl derivatives of molybdenum(IV) with a 16 valence-electron configuration, **663**, 78
Syntheses, X-ray structures, and reactions of ruthenium carbonyl complexes containing 1,1-dithiolates, **650**, 37
Divalent lanthanides
Lanthanide(II) complexes bearing mixed linked and unlinked cyclopentadienyl–monodentate-anionic ligands, **647**, 61
Diyne
Ruthenium cluster carbonyls containing ligands derived from ferrocenylalkynes, **650**, 188
d°-Metal complexes
Structural characterization of Group 4 transition metal halide bis-Arduengo carbene complexes MCl_4L_2: X-ray crystal structure analyses and DFT calculations, **663**, 192
Dodecahydro-*closo*-dodeca-borate(2−) anion
Dihydrogen bonding of decahydro-*closo*-decaborate(2−) and dodecahydro-*closo*-dodecaborate(2−) anions with proton donors: experimental and theoretical investigation, **657**, 155
DOE
Investigations into the Suzuki–Miyaura coupling aiming at multi-

kilogram synthesis of E2040 using (*o*-cyanophenyl)boronic esters, **653**, 269
Donor–acceptor interactions
Donor–acceptor interactions with electrophilic terminal phosphinidene complexes, **643-644**, 223
Donor functionalized Cp and Ind ligand
Intramolecular coordination of Ln–O and Ln–N bonds in some new substituted lanthanocene complexes, **647**, 100
Double carbonylation
Conversion of alkynes to cyclic imides and anhydrides using reactive iron carbonyls prepared from $Fe(CO)_5$ and $Fe_3(CO)_{12}$, **649**, 209
Doubly-bonded derivatives of germanium and phosphorus
The first stable 3,1-germaphosphaallene Tip(*t*-Bu)Ge=C=PAr, **643-644**, 202
Doubly bridged
Synthesis, structure and polymerization catalytic properties of doubly bridged bis(cyclopentadienyl) dinuclear titanium and zirconium complexes, **645**, 212
dppb Ligand
Synthesis and characterization of Group 6 transition-metal [70]fullerene derivatives containing dppb ligands. Crystal structure of *fac*-$Mo(CO)_3$(dppb)(CH_3CN), **662**, 51
DSC
Coordination chemistry of tin: Part III. The crystal structure and thermal behavior of dipotassium dimethyl-tetrafluoro-stannate dihydrate, $K_2[(CH_3)_2SnF_4]\cdot 2H_2O$, **649**, 147
Dual site catalysts
Dinuclear ansa zirconocene complexes containing a sandwich and a half-sandwich moiety as catalysts for the polymerization of ethylene, **658**, 259
Dynamic kinetic resolution
The lactone concept—a novel approach to the metal-assisted atroposelective construction of axially chiral biaryl systems, **661**, 31
Dynamic NMR
A novel mechanism for the fluxional behaviour of [Pd(η^2-tetramethylethylenetetracarboxylate)(2-methylthiomethylpyridine)], **642**, 58
Dynamic process
Pyrolysis of $[Ru_3(CO)_{10}(dppe)]$: activation of C–H and P–Ph bonds. The crystal structure and dynamical behavior of $[Ru_4(CO)_9(\mu\text{-}CO)\{\mu_4\text{-}\eta^2\text{-}PCH_2CH_2P(C_6H_5)_2\}(\mu_4\text{-}\eta^4\text{-}C_6H_4)]$, **660**, 153
Synthesis and properties of homoannularly- and heteroannularly carbonyl-bridged binuclear ruthenocene derivatives, **648**, 72

E2040
Investigations into the Suzuki–Miyaura coupling aiming at multikilogram synthesis of E2040 using (*o*-cyanophenyl)boronic esters, **653**, 269
Early–late complex
Synthesis and electrochemical behaviour of σ,η^2-acetylide-bridged early–late complexes;: The solid-state structure of $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ti(C{\equiv}CSiMe_3)_2]Pd(PPh_3)$, **664**, 123
Early transition metal complexes
A theoretical analysis of [M(tmtaa)] and [M(acacen)] fragments employed in the organometallic chemistry of early transition metals, **648**, 14
Effect of complexation
Structural properties of azaphosphirane and its $W(CO)_5$ complex. A density functional study, **643-644**, 369
2-{[(*E*)-1-(2-hydroxyaryl)alkylidene]amino}acetic acid
The synthesis and structural characterization of some triorganotin(IV) complexes of 2-{[(*E*)-1-(2-hydroxyaryl)alkylidene]amino}-acetic acid. Crystal and molecular structures of $Ph_3Sn(2\text{-}OHC_6H_4C(H){=}NCH_2COO)$ and $Me_3Sn(2\text{-}OHC_6H_4C(CH_3){=}NCH_2COO)$, **654**, 100
EL device
Synthesis of novel bithiophene derivatives with an organosilanylene bridge, and their applications to electron-transporting materials in EL devices, **642**, 137
Electonic coupling
Electronic coupling in covalently-linked M–M quadruple bonds: $M_2\delta$ to ligand π conjugation, **641**, 15
Electrocatalytic reduction
Electrocatalytic reduction of aldehydes and ketones on nickel(II) tetraazamacrocyclic complex-modified graphite felt electrode, **662**, 9
Electrochemical sensing
Amplification upon polymerization of the electrochemical anion sensing properties of an amidoferrocene monoreceptor molecule, **656**, 116
Electrochemistry
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Dimeric cyclopalladated azobenzenes: structural differences between 2-hydroxypyridine and 2-mercaptopyridine bridged complexes, **650**, 202
Electrochemistry of $Ru_2Cp'_2(CO)_4$ and $Ru_2Cp_2(CO)_3(PMe_3)$ and the estimation of $Ru_2(\mu\text{-}H)$ bond dissociation enthalpies, **656**, 181
Organometallic complexes for nonlinear optics: Part 25. Quadratic and cubic hyperpolarizabilities of some dipolar and quadrupolar gold and ruthenium complexes, **642**, 259
Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)tetrathiafulvalenes, **643-644**, 292
Synthesis and crystal structure of highly soluble ansa-titano- and zirconocene dichloride complexes $[Me_2Si(\eta^5\text{-}C_5H_2(SiMe_3)_2]_2MCl_2$ (M = Ti, Zr), **649**, 15
Synthesis and electrochemistry of 5-ferrocene-glucosamide, 5-ferrocene-glucosamide phosphate and 5-ferrocene-amido-5-adenosine in aqueous solution, **648**, 81
Synthesis and electrochemistry of niobium complexes incorporating asymmetrically substituted *ansa*-ligands, **655**, 63
Synthesis, characterization and electrochemistry of diruthenium complexes linked by aryl acetylide bridges, **660**, 1
Synthesis of novel chiral bis(ferrocenyl) ligands and their use as voltammetric metal cation sensors, **656**, 211
Transition metal mediated routes to poly(arylphosphine)s: investigation of novel phosphorus containing conjugated polymers, **653**, 167
Electron deficient alkenes
Reactions of cobaloxime η^1-allyl complexes with electron deficient alkenes, **656**, 217
Electron density
Density functional investigation of incorporation of functional additives to neutral salicylaldiminato Ni(II) polymerization catalyst, **654**, 132
Electron donating ability
Alkynylcarbyne complexes containing various tri- and bidentate ligands such as cyclopentadienide, tris(pyrazolyl)borate, bis(pyrazolyl)acetate and tmeda: synthesis and spectroscopic properties, **641**, 134
Electronic absorption spectra
Gas-phase electronic absorption spectra of metallocene dihydrides $M(\eta^5\text{-}C_5H_5)_2H_2$ (M = Mo, W), **664**, 106
Rydberg spectra of bis(η^6-benzene)chromium derivatives: Gas-phase photoabsorption study of bis(η^6-1,2,4-trimethylbenzene)

chromium and bis(η^6-1,2,4,5-tetramethylbenzene)chromium, **649**, 100
Electronic effects
Allyl–palladium complexes with fluorinated benzene thiolate ligands. Examination of the electronic effects in the Pd-catalyzed allylic alkylation reaction with the catalytic system $[(\eta^3\text{-}C_3H_5)Pd(\mu\text{-}SR_f)]_2/PR_3$, **654**, 16
Electronic effects on the acidity of phosphorus(III) triflates, **643-644**, 516
Quantum chemical studies on elementary fragments of three-coordinated methylaluminoxanes, **648**, 49
Silanones and metasilicates from negatively charged $\equiv SiO^{(-)}$ and $=SiO_2^{(2-)}$ precursors. Theoretical study, **642**, 163
Electronic reason
Electronic reason for the stabilization of osmabenzyne, **658**, 9
Electron localization function (ELF)
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, **643-644**, 105
Electron pair
Heteroboranes of the p-block elements, **646**, 21
Electron spin delocalization
Two nickelocenes and ferrocene in a rigid *cis/trans* chain, **658**, 266
Electron transfer
Effects of counterions on intramolecular electron transfer in 1′,1‴-dinaphthylmethylbiferrocenium cation: structural, Mössbauer and EPR characteristics, **659**, 125
Electron-transport
Synthesis of novel bithiophene derivatives with an organosilanylene bridge, and their applications to electron-transporting materials in EL devices, **642**, 137
Electrophilic
Exploiting the versatility of organometallic cross-coupling reactions for entry into extended aromatic systems, **653**, 215
Proton catalysis of nucleophilic substitution at pentacoordinate silicon, **655**, 1
Electrophilic substitution
Carboxylation of 3,3′,4,4′-tetramethyl-1,1′-diphosphaferrocene with CO_2 in the presence of $AlCl_3$, **642**, 143
Electrospray mass spectrometry
Tricarbonylrhenium(I) complexes of phosphine-derivatized amines, amino acids and a model peptide: structures, solution behavior and cytotoxicity, **650**, 123
Enamides
A practical access to α-phosphonoenamides, **643-644**, 404
Enantiomeric resolution
Synthesis, reaction and enantiomeric resolution of chiral clusters containing SRuNiM (M = Mo, W) core, **664**, 201
Enantioselective catalysis
The directed synthesis of axially chiral ligands, reagents, catalysts, and natural products through the 'lactone methodology', **661**, 49
Enantioselective hydrogenation
From homogeneous to heterogeneous catalysis: zeolite supported metal complexes with C_2-multidentate nitrogen ligands. Application as catalysts for olefin hydrogenation and cyclopropanation reactions, **655**, 134
Enantioselective synthesis
Defining effective chiral binding sites at lanthanides—highly enantioselective reagents and catalysts from binaphtholate and pybox ligands, **647**, 151
Enantioselective transformations
Biocatalytic synthesis of optically active oxyfunctionalized building blocks with enzymes, chemoenzymes and microorganisms, **661**, 17
Ene-diamido
Theoretical study of the bonding capabilities of 1,4-diaza-1,3-butadiene and *cis*-1,3-butadiene ligands in cyclopentadienyl tantalum(V) complexes, **655**, 16
Ene-diyne
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, **643-644**, 342
Energy gaps
Structure–property relationships in phosphole oligomers: a theoretical insight, **643-644**, 194
Ene-yne-allenephosphine
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, **643-644**, 342
Enynes
The reaction of $[H_4Ru_4(CO)_{12}]$ with 1-penten-3-yne: dimerization and trimerization through the triple bonds, **649**, 43
Enyne silanes
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, **643-644**, 324
Epoxidation
New insights into the reaction of *t*-butylhydroperoxide with dichloro- and dimethyl(dioxo)molybdenum(VI), **649**, 108
Epoxidations
Reactions of cyclopentadienylmolybdenum compounds with bismuth alkoxides, **641**, 9
Epoxy alcohols
Regioselective, stereospecific, and chemoselective fluorination of epoxy alcohols: development of fluorinating hybrid reagents, associated with Lewis acid metal fluoride/ammonium hydrogen fluoride, **662**, 77
EPR
Isolation of a stable Cr(V) intermediate in the oxidation of aryl-substituted alkenes by chromylchloride, **641**, 121
EPR spectra
One-pot dodecanitration of Zn(II) and Ni(II) *meso*-tetrakis-(2,6-dichlorophenyl) porphyrin, and extreme redox properties of the obtained complexes, **643-644**, 522
ESI
Detection of aryllead(IV) carboxylates and their solvent adducts by ESI-mass spectrometry, **645**, 176
ESR
Preparation and characterization of substituted pentaarylcyclopentadienyliron dicarbonyl bromide complexes containing methyl or fluorine substituents on the arene rings, **656**, 146
ESR spectra
Syntheses and properties of some *exo,exo*-bis(isodicyclopentadienyl)titanium low-valent complexes, **656**, 81
ESR spectroscopy
Solid-state structures of persubstituted titanocene chlorides bridged with long aliphatic *ansa*-chains, **642**, 148
Estrogen
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, **643-644**, 350
Ethene polymerization
Structural characterization of Group 4 transition metal halide bis-Arduengo carbene complexes MCl_4L_2: X-ray crystal structure analyses and DFT calculations, **663**, 192
Ethylene
Investigation of the hydroformylation of ethylene in liquid carbon dioxide, **650**, 249
Organo-rare-earth-metal initiated living polymerizations of polar and nonpolar monomers, **647**, 128
Ethylene complexes
Theoretical analysis of bis(ethylene) complexes of molybdenum and tungsten, **663**, 83
Ethylene oligomerisation
Synthesis, characterisation and catalytic activity of Pd(II) and Ni(II) complexes with new cyclic α-diphenylphosphino-ketoi-

mines. Crystal structure of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclopentylidene)aniline and of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclohexylidene)aniline, **662**, 150
Ethylene oligomerization
Cobalt and nickel complexes bearing 2,6-bis (imino) phenoxy ligands: syntheses, structures and oligomerization studies, **650**, 59
Synthesis of cobalt(II) and iron(II) complexes with the ligand bis(2-diphenylphosphinoethyl)methylamine and their catalytic action on ethylene oligomerization. X-ray crystal structure of $[CoCl_2\{CH_3N(CH_2CH_2PPh_2)_2\}]$, **645**, 127
Ethylene polymerization
Chromium complexes coordinated with chelating disiloxane-1,3-diamido ligands as catalyst precursors for ethylene polymerization, **642**, 156
Polymer immobilized silane bridged metallocene catalysts for ethylene polymerization, **655**, 167
Solution structure and decomposition pathway of zwitterionic zirconium (IV) benzyl complexes, **658**, 1
Synthesis and structure of a chromium(III) complex coordinated by 1,1′-Bi-2-naphtholate ligands and its catalytic activity for ethylene polymerization, **648**, 226
Synthesis of novel metallacyclic zirconocene complexes from ω-alkenyl-functionalized zirconocene dichloride complexes and their use in the α-olefin polymerization, **648**, 134
Ethylene polymerization catalyst
Density functional investigation of incorporation of functional additives to neutral salicylaldiminato Ni(II) polymerization catalyst, **654**, 132
Ethynylpyridyls
Intramolecular interactions in 2,6-pyridylacetylenes and their $Co_2(CO)_4$dppm complexes, **648**, 251
EXAFS
EXAFS investigation of metal organic synthesis tools, **649**, 128
Exchange reactions
Transformations of organosilanes by Pt(II) complexes with hemilabile P,N-chelating ligands, **646**, 53

fac–*fac* and *fac*–*mer* configuration
Preparation and structural characterization of six new diorganotin(IV) complexes of the $R_2Sn(SaleanH_2)$ and $R_2Sn(SalceanH_2)$ type (R = Me, ^{n}Bu, Ph), **664**, 188
Facial coordination
Facial coordination of cyclooctatetraene to a Co_2Ni triangle in a heterometallic trinuclear cluster complex, **641**, 142
Far-FTIR spectroscopy
Preparation and characterization of substituted pentaarylcyclopentadienyliron dicarbonyl bromide complexes containing methyl or fluorine substituents on the arene rings, **656**, 146
^{57}Fe Mössbauer spectroscopy
Metal atom motion, vibrational anisotropy and hydrogen bonding effects in octamethylferrocenylmethanol, **642**, 203
Femtochemistry
Time-resolved organometallic photochemistry: Femtosecond fragmentation and adaptive control of $CpFe(CO)_2X$ (X = Cl, Br, I), **661**, 199
Ferracarboranes
Polysubstituted derivatives of 3-(η^5-Cp)-4-SMe_2-3,1,2-$FeC_2B_9H_{10}$. X-ray structure of 3-(η^5-Cp)-4-SMe_2-7,8-$(CF_3COO)_2$-12-HgCl-3,1,2-$FeC_2B_9H_7$, **657**, 171
Ferrate
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
1,1′-Ferrocene
Preparation, properties, and reactions of metal-containing heterocycles: Part CVIII. A novel generation of rigid, nanoscaled 1,1′-ferrocenediyl-bridged bis(pyridine), bis(bipyridine), and bis(phenanthroline) ligands, **660**, 78
Ferrocene
Amplification upon polymerization of the electrochemical anion sensing properties of an amidoferrocene monoreceptor molecule, **656**, 116
Applications of boron–nitrogen and boron–phosphorus adducts in organometallic chemistry, **652**, 11
Coupling of ferrocenyl chromium carbene complex with cyclobutenediones, **656**, 11
3,3-Diferrocenylcyclopropene, **659**, 56
Preparation, characterization and properties of dipolar 1,2-*N*,*N*-dimethylaminomethylferrocenylsilanes, **654**, 187
Reaction of bromopentacarbonylrhenium(I) with ferrocenylcarbaldehyde thiosemicarbazones: the first X-ray diffraction studies of metal carbonyl complexes containing bidentate thiosemicarbazone ligands, **656**, 1
Retrocyclization reactions of *gem*-dibromo(ferrocenyl)cyclopropanes, **645**, 183
Ruthenium cluster carbonyls containing ligands derived from ferrocenylalkynes, **650**, 188
Synthesis and biological activity of novel cyanoacrylates containing ferrocenyl moiety, **655**, 182
Synthesis and characterisation of new platinum ethynyl dimers and polymers with pendant ferrocenyl groups, **649**, 94
Synthesis and electrochemistry of 5-ferrocene-glucosamide, 5-ferrocene-glucosamide phosphate and 5-ferrocene-amido-5-adenosine in aqueous solution, **648**, 81
Synthesis and luminescence properties of novel ferrocene–naphthalimides dyads, **645**, 168
Synthesis, characterization and structural studies of new heterometallic alkynyl complexes of platinum and Group 11 metals with chelating bis(diphenylphosphino)ferrocene ligand, **659**, 107
Synthesis of novel chiral bis(ferrocenyl) ligands and their use as voltammetric metal cation sensors, **656**, 211
Synthesis of 'three-petal' carbocyclic systems based on *s-cis*-diferrocenyltrienes, **649**, 86
Synthesis, structure and reactivity study of 1,1′-bis(*N*-*ter*-butyl-*N*-hydroxyamino)ferrocene, **654**, 210
Two nickelocenes and ferrocene in a rigid *cis*/*trans* chain, **658**, 266
Ferrocene compounds
Ferrocenyl hydroxymethylphosphines (η^5-C_5H_5)Fe[η^5-$C_5H_4P(CH_2OH)_2$] and 1,1′-[Fe{η^5-$C_5H_4P(CH_2OH)_2$}$_2$] and their chalcogenide derivatives, **658**, 181
Ferrocene containing polymers
Synthesis of conjugated polymers with ferrocene units as pendants or as end-groups, **645**, 27
Ferrocene derivatives
Synthesis and characterization of the inclusion compound of a methyltrioxorhenium(VII) adduct of 4-ferrocenylpyridine with β-cyclodextrin, **656**, 281
Ferrocenes
β-Ferrocenyl-β-amino alcohols: a new class of central chiral ferrocene derivatives, **642**, 212
4-Ferrocenyl-1,3-oxazoline derivatives as ligands for catalytic asymmetric allylation reactions, **660**, 62
Silyl derivatives of ferrocene with pending indenyl or fluorenyl substituents at silicon, **656**, 71
[3]Ferrocenophane
Syntheses and structural characterization of some mono- and di-*p*-nitrophenyl[3]ferrocenophanes: X-ray structure of [3]ferrocenophane, 3-*p*-nitrophenyl[3]ferrocenophane, and 3,4′-bis-(*p*-nitrophenyl)[3]ferrocenophane; DFT calculations on ferrocene derivatives, **649**, 161
Ferrocenophanes
Synthesis of unsymmetrical 1,1′-disubstituted ferrocenes. Formation of ferrocenophanes via intramolecular cycloaddition, **654**, 117

Ferrocenyl
Intramolecular interactions in 2,6-pyridylacetylenes and their $Co_2(CO)_4$dppm complexes, **648**, 251
Ferrocenylalkenes
Retrocyclization reactions of *gem*-dibromo(ferrocenyl)cyclopropanes, **645**, 183
Ferrocenylallylic cation
3,3-Diferrocenylcyclopropene, **659**, 56
Ferrocenylaminates
Lithiation of ferrocenylamines and vanadium dinitrogen chemistry, **664**, 245
Ferrocenyl carbene
Coupling of ferrocenyl chromium carbene complex with cyclobutenediones, **656**, 11
Ferrocenylcarbenoid
3,3-Diferrocenylcyclopropene, **659**, 56
Ferrocenylcyclopropane
3,3-Diferrocenylcyclopropene, **659**, 56
Ferrocenylcyclopropene
3,3-Diferrocenylcyclopropene, **659**, 56
Ferrocenyl group
'User-friendly' primary phosphines and an arsine: synthesis and characterization of new air-stable ligands incorporating the ferrocenyl group, **656**, 120
Ferrocenylimines
Heterodimetallic palladium(II) compounds containing terdentate [Csp^2(ferrocene),N,N′]$^-$ ferrocenyl ligands, **651**, 105
Ferrocenyloxazoline
New ruthenium(II) complexes containing the chiral ligand (4*S*)-2-[(S_p)-2-(diphenylphosphino)ferrocenyl]-4-(methylethyl)oxazoline (FcPN). X-ray structures of *mer*–*trans*-[$RuCl_2$(dppm)(FcPN)] (dppm = bis(diphenylphosphino)methane) and *cis*-[$RuCl_2$(CO)(py)(FcPN)], **663**, 204
Ferrocenyl phosphine
Isolation and structural characterization of some stable Pd(II) carboxylate complexes supported by 1,1′-bis(diphenylphosphino) ferrocene (dppf), **658**, 159
Ferrocenylphosphine
New ruthenium(II) complexes containing the chiral ligand (4*S*)-2-[(S_p)-2-(diphenylphosphino)ferrocenyl]-4-(methylethyl)oxazoline (FcPN). X-ray structures of *mer*–*trans*-[$RuCl_2$(dppm)(FcPN)] (dppm = bis(diphenylphosphino)methane) and *cis*-[$RuCl_2$(CO)(py)(FcPN)], **663**, 204
Ferrocenyl phosphines
Development of new palladium catalysts for the alkoxycarbonylation of aryl chlorides, **641**, 30
Fibre
Boron nitride thin fibres obtained from a new copolymer borazine–tri(methylamino)borazine precursor, **657**, 107
Fischer carbene
Coupling of ferrocenyl chromium carbene complex with cyclobutenediones, **656**, 11
Fischer carbene complexes
A facile and diastereoselective access to substituted cyclopentanones from Fischer alkenyl carbene complexes and 1-amino-1-azadienes, **643-644**, 363
Fluoranthene
Metal π complexes of benzene derivatives: Part 56. (η^6-Fluoranthene)(tricarbonyl)chromium: isomerism and haptotropic equilibration, **641**, 208
Fluorenyl
Cyclopentadienyl, indenyl, and fluorenyl complexes of sodium with 15-crown-5, **649**, 50
Novel fluorenyl alkali metal DIGLYME complexes: synthesis and solid state structures, **656**, 89
Silyl derivatives of ferrocene with pending indenyl or fluorenyl substituents at silicon, **656**, 71
Fluorenyl cyclopentadienyl
Synthesis, structural characterization and catalytic behavior of one-atom bridged fluorenyl cyclopentadienyl lanthanocene complexes with C_s- or C_1-symmetry, **647**, 114
Fluorescence
Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, **643-644**, 89
First siloxane tethered paracyclophane, **646**, 167
Fluorescence spectra
A new approach to photophysical properties control of main group element π-electron compounds based on the coordination number change, **652**, 3
Cross-coupling reactions in the chemistry of silole-containing π-conjugated oligomers and polymers, **653**, 223
The coordination number–photophysical properties relationship of trianthrylphosphorus compounds: doubly locked fluorescence of anthryl groups, **646**, 277
Fluorescent dyes
C–C Cross-coupling reactions for the combinatorial synthesis of novel organic materials, **653**, 200
Fluoride
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Observation of inter- and intramolecular C–H···F hydrogen bonding in Gingras' salt: [*n*-Bu_4N]$^+$[Ph_3SnF_2]$^-$, **648**, 204
Fluoride ion
How I came across the silicon-based cross-coupling reaction, **653**, 58
Fluorinated
Synthesis and structure of a highly fluorinated 7-bora-7*H*-benzo[*de*]anthracene, **643-644**, 164
Fluorinating hybrid reagents
Regioselective, stereospecific, and chemoselective fluorination of epoxy alcohols: development of fluorinating hybrid reagents, associated with Lewis acid metal fluoride/ammonium hydrogen fluoride, **662**, 77
Fluoro
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Fluoroalkyldistannoxanes
Synthesis and characterization of fluoroalkyldistannoxanes, **648**, 246
Fluoroaryl
Synthesis of 2,4,6-tris(trifluoromethyl)phenyl complexes of gold and thallium, **648**, 1
Fluoromethylidyne ligands
Formation of novel unsaturated fluorinated ligands by metal induced C–C coupling reaction of difluoroallene with fluoromethylidyne ligands of $Fe_3(CO)_9(\mu_3\text{-}CF)_2$, **641**, 215
Fluorophosphites
The phosphorofluoroamidite approach to mixed phosphites, **643-644**, 490
Fluorothiolate complexes
Allyl–palladium complexes with fluorinated benzene thiolate ligands. Examination of the electronic effects in the Pd-catalyzed allylic alkylation reaction with the catalytic system [(η^3-C_3H_5)Pd(μ-SR_f)]$_2$/PR_3, **654**, 16
Fluorous synthesis
New highly fluorinated dirhodium(II) tetrakis(alkanecarboxylates) as catalysts for carbenoid C–H insertion reactions, **643-644**, 174
Fluxional behavior
Fluxional behavior of chromium and tungsten complexes of monodentate bis(trimethylphosphine)diborane(4), [$M(CO)_5$(η^1-B_2H_4·2PMe_3)] (M = Cr, W): A model case for alkane–metal complexes, **659**, 102
Fluxionality
Investigations on the trigonal twist process in the pseudooctahedral

complexes $[MX(CO)_2(P-P)(\eta^3\text{-}R)]$ (M = Mo or W; X = halide or pseudohalide; P–P = bidentate P-donor ligand; R = cycloheptatrienyl, cyclohexenyl or cyclooctenyl), **645**, 218
Structural and dynamic studies in solution of anionic dinuclear azolato-bridged palladium(II) complexes, **663**, 108
Force constants
A new method for calculating the CO-factored force constants of pentacarbonyliron, **658**, 176
Formate
The reaction of samarium(II) with manganese carbonyl: unexpected conversion of CO to formate. X-ray crystal structures of $[Sm(Tp^{Me2})_2]Mn(CO)_5$ and $\{[Sm(Tp^{Me2})_2]_2(\mu\text{-}HCO_2)\}Mn(CO)_5$ (Tp^{Me2} = HB(3,5-dimethylpyrazolyl), **664**, 298
Formyl
The synthesis and characterization of 1-formyl-2-acylcyclopentadienylthallium compounds, **642**, 268
Fragmentation
cyclo-Hexaphosphane versus *cyclo*-hexaarsane fragmentation on a sulphur-capped mixed-metal dicobalt–iron skeleton, **642**, 237
Synthesis of 'three-petal' carbocyclic systems based on *s-cis*-diferrocenyltrienes, **649**, 86
Free radicals
Spin chemistry of organometallic compounds: 2. Interaction of *N*-bromohexamethyldisilazane with allyltriorganolsilanes, **658**, 228
FT-ICR/MS
Organolanthanide chemistry in the gas phase, **647**, 216
FT-IR and Raman spectroscopy
A theoretical study of the reaction products created by irradiation of the carbonyl iron silyl complexes $Cp(CO)_2FeSiH_2Me$ and $Cp(CO)_2FeCH_2SiH_3$, **648**, 155
FTIR spectroscopy
Substitution kinetics of $Cr(CO)_5(\eta^2\text{-}Z\text{-cyclooctene})$ with tetracyanoethylene, **658**, 274
FT-Raman spectroscopy
The metal–carbon bond in vinylidene, carbonyl, isocyanide and ethylene complexes, **661**, 181
[70]Fullerene
Synthesis and characterization of Group 6 transition-metal [70]fullerene derivatives containing dppb ligands. Crystal structure of *fac*-$Mo(CO)_3$(dppb)(CH_3CN), **662**, 51
Fullerene
Regioselective penta-addition of 1-alkenyl copper reagent to [60]fullerene. Synthesis of penta-alkenyl FCp ligand, **652**, 31
Fullerenes
Oxorhenium(V) '3+2' mixed-ligand complexes carrying the SNO/SN donor and C_{60}, **664**, 208
Fulvalene
Dinuclear zirconium complexes containing the fulvalene ligand. Synthesis and reactivity, **645**, 112
Functional additives
Density functional investigation of incorporation of functional additives to neutral salicylaldiminato Ni(II) polymerization catalyst, **654**, 132
Functional derivatives
Synthesis of functional derivatives of the $[3,3'\text{-}Co(1,2\text{-}C_2B_9H_{11})_2]^-$ anion, **649**, 1
Functionalized chiral phosphines
Water soluble phosphines: Part XV. Syntheses of multiply functionalized and chiral phosphine ligands by Pd-catalyzed P–C and C–C coupling reactions, **645**, 14
Functionalized isocyanide
Synthesis, coordination and reactivity of 2-(trimethylsiloxymethyl)phenyl- and 2-(hydroxymethyl)phenyl isocyanides, **662**, 70
Functionalized methyl carbanions
Tin–magnesium transmetallation reactions, **655**, 111
Functionalized oxime
Synthesis, spectroscopic and structural aspects of some tetraorganodistannoxanes with internally functionalized oxime: crystal and molecular structures of $[\{R_2Sn(ON{=}C(Me)py)\}_2O]_2$ (R = Bu^n and Et) and 2-$NC_5H_4C(Me){=}NOH$, **651**, 98
Functionalized polypyrrole
Amplification upon polymerization of the electrochemical anion sensing properties of an amidoferrocene monoreceptor molecule, **656**, 116
Functionally substituted 1-alkynes
Synthesis, characterization of new Rh–Co mixed-metal clusters and reactions of clusters containing $[Rh_2Co_2C_2]$ core with 1-alkynes and/or carbon monoxide, **650**, 181
Furylcarbene
Synthesis of 2-pyranylidene or (2-furyl)carbene–chromium complexes from conjugated enyne carbonyl compounds with $Cr(CO)_5$(THF), **645**, 228
Fusion modes
Macropolyhedral boron-containing cluster chemistry: A novel triple-cluster structural motif. Isolation and characterisation of contiguous twenty-vertex $[(PPh_3)_4ClPd_4B_{16}H_{17}(PPh_3)_2]$, **657**, 262
GABA analogs
Palladium-catalyzed cross-coupling reaction of anilinium hypophosphite with alkenyl bromides and triflates: application to the synthesis of GABA analogs, **653**, 252
Gallanate
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Gallium
A novel synthetic route to pentaalkylcyclopentadienylgallium(I) compounds, **654**, 176
Cp^*GaCl_2 and Cp^*_2GaCl ($Cp^* = \eta^1\text{-}C_5Me_5$) as starting materials for novel Group 13 element complexes, **646**, 247
Synthesis and structural characterisation of the 3,5-di-*tert*-butyl-1,2,4-triphospholyl complexes of monovalent gallium and thallium, $[M(\eta^5\text{-}P_3C_2Bu^t_2)]$, M = Ga, Tl, **646**, 191
The unusual reaction of $Ga(C_5Me_5)_3$ with a nucleophilic carbene, **643-644**, 487
Gallium complexes
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, **643-644**, 53
Gallium NMR
Synthesis and structural characterisation of the 3,5-di-*tert*-butyl-1,2,4-triphospholyl complexes of monovalent gallium and thallium, $[M(\eta^5\text{-}P_3C_2Bu^t_2)]$, M = Ga, Tl, **646**, 191
Gas phase
Organolanthanide chemistry in the gas phase, **647**, 216
Gas-phase chemistry
Kinetics of the gas phase reactions of the ion $C_5H_5Fe^+$ with substituted pyridines, **650**, 69
Generation of trications
Generation of $[1,2\text{-}(CH_2)_2C_5Me_3MC_5Me_4CH_2\text{-}1']^{3+}$ (M = Ru, Os) trications and determination of their structures by comparing NMR-spectra with density-functional method calculations, **645**, 87
Germacyanogen isomers
A theoretical study of linear germacyanogen isomers, **659**, 121
Germanate
New linked di-germanocenes and di-stannocenes, **651**, 44
Germanium
Niobium, titanium, zirconium and hafnium complexes incorporating germanium bridged *ansa* ligands. X-Ray crystal structures of $[Zr\{Me_2Ge(\eta^5\text{-}C_5Me_4)_2\}Cl_2]$ and $[M\{Me_2Ge(\eta^5\text{-}C_5Me_4)(\eta^5\text{-}C_5H_4)\}Cl_2]$ (M = Zr, Hf), **656**, 129
Some recent advances in the chemistry of silicon and its homologues in low coordination states, **646**, 39

Synthesis of bis(pyrazol-1-yl)methanes with organogermyl and organosilyl groups on the methine carbon and their reaction with $W(CO)_5(THF)$. X-ray crystal structures of $Ph_3GeCHPz_2W(CO)_4$ and $Me_3SiCHPz_2W(CO)_4$ (Pz = 3,5-dimethylpyrazole), **658**, 198

Germanocene
New linked di-germanocenes and di-stannocenes, **651**, 44
Germaoxetanes
The first stable 3,1-germaphosphaallene Tip(*t*-Bu)Ge=C=PAr, **643-644**, 202
Germaphosphaallene
The first stable 3,1-germaphosphaallene Tip(*t*-Bu)Ge=C=PAr, **643-644**, 202
Germatrane
Synthesis, molecular structure and biological activity of bromobenzylgermatranes, **659**, 165
Germyl complex
Convenient preparation of $Li[(\eta^5\text{-}C_5Me_5)M(CO)_2]$ (M = Ru, Fe) by the reaction of $(\eta^5\text{-}C_5Me_5)M(CO)_2H$ with *n*-BuLi, **645**, 201
Glucosamine
Synthesis and electrochemistry of 5-ferrocene-glucosamide, 5-ferrocene-glucosamide phosphate and 5-ferrocene-amido-5-adenosine in aqueous solution, **648**, 81
Glycidyl ethers
Cleavage of different ether bonds in butyl glycidyl ether and allyl glycidyl ether by K^-, K^+(15-crown-5)$_2$, **660**, 133
Gold
A dimeric gold(I) triphospholyl complex, **643-644**, 357
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Organometallic complexes for nonlinear optics: Part 25. Quadratic and cubic hyperpolarizabilities of some dipolar and quadrupolar gold and ruthenium complexes, **642**, 259
Synthesis of 2,4,6-tris(trifluoromethyl)phenyl complexes of gold and thallium, **648**, 1
Gol'danskii–Karyagin effect
Cofacial interaction of ferrocenyl groups and metal atom motional anisotropy in [10]annulene organometallics, **658**, 210
Gold(I)
The first anionic arenediethynylgold(I) complexes, **663**, 40
Gold(I) complexes
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, **643-644**, 313
Gomberg arylation reaction
Syntheses and structural characterization of some mono- and di-*p*-nitrophenyl[3]ferrocenophanes: X-ray structure of [3]ferrocenophane, 3-*p*-nitrophenyl[3]ferrocenophane, and 3,4′-bis-(*p*-nitrophenyl)[3]ferrocenophane; DFT calculations on ferrocene derivatives, **649**, 161
Green chemistry
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, **643-644**, 125
Green's GaI
A novel synthetic route to pentaalkylcyclopentadienylgallium(I) compounds, **654**, 176
Grignard
Some applications of the Grignard cross-coupling reaction in the industrial field, **653**, 288
Synthesis, characterization and X-ray structures of bis(arytelluro)ethynes, **654**, 91
Grignard analogues
Attachment to manganese or cobalt of a bulky tri(organosilyl)methyl ligand containing an NMe_2 or an OMe donor group, **649**, 121
Grignard compounds
EXAFS investigation of metal organic synthesis tools, **649**, 128
Grignard reagent
Discovery of the cross-coupling reaction between Grignard reagents and $C(sp^2)$ halides catalyzed by nickel–phosphine complexes, **653**, 23
Grignard reagents
Michael addition of Grignard reagents to tetraethyl ethenylidenebisphosphonate, **650**, 77
Palladium-catalyzed cross-coupling reaction of organic halides with Grignard reagents, organolithium compounds and heteroatom nucleophiles, **653**, 27
Group 10
Synthesis of Group 10 polyfluorothiolate mono- and bi-nuclear complexes. Crystal structures of $[Ni(SC_6HF_4)_2(dppe)]$, $[(dppe)Ni(\mu\text{-}SC_6HF_4)_2Pd(C_6F_5)_2]$ and $[(dppe)Ni(\mu\text{-}SC_6F_5)_2Pd(C_6F_5)_2]$, **663**, 98
Group 11
Recent studies on alkynyl complexes of the Group 11 and 12 metals, **641**, 126
Group 14 derivatives
Synthesis and reactivity of Group 14 substituted amino-functionalised cyclopentadienyl compounds, **656**, 49
Group 6 metal carbonyl complex
Synthesis and reactivity of Group 6 metal carbonyl complexes containing bis(triazol-1-yl)methane: linkage coordination polymers, **642**, 179
Group 6 metal carbonyl complexes
Synthesis and crystal structures of Group 6 metal carbonyl complexes containing S-rich bis(pyrazol-1-yl)methane ligands, **649**, 152
Group 13 metals
Chemical applications of topology and group theory. Part 36. Deltahedral and fused deltahedral organometallic gallium and indium clusters, **646**, 146
Group 4 transition metal
Synthesis of Group 4 transition-metal complexes bearing a secondary phosphine pendant cyclopentadienyl ligand, **648**, 231
Group 6 transition metal complexes
Synthesis of *cis*-dichloride complexes of Group 6 transition metals bearing alkyne and chalcogen-bridged chelating bis(aryloxo) ligands as catalyst precursors for ring-opening metathesis polymerization, **654**, 74
Synthesis of novel oxo complexes of tungsten and molybdenum with various chalcogen-bridged chelating bis(aryloxo) ligands and their catalytic behavior for ring-opening metathesis polymerization, **651**, 114
Grubbs catalyst
An 'Old Hydride' in a new synthesis: a convenient approach to Grubbs-type carbene complexes $(PPh_3)_2Cl_2Ru{=}CH{-}CH{=}CR_2$ and their hexacoordinate acetonitrile adducts, **641**, 220
Guaiazulene
Preparation, structures, and haptotropic rearrangement of novel dinuclear ruthenium complexes, $(\mu_2,\eta^3{:}\eta^5\text{-guaiazulene})Ru_2(CO)_4(CNR)$, **650**, 96

Hafnium
Niobium, titanium, zirconium and hafnium complexes incorporating germanium bridged *ansa* ligands. X-Ray crystal structures of $[Zr\{Me_2Ge(\eta^5\text{-}C_5Me_4)_2\}Cl_2]$ and $[M\{Me_2Ge(\eta^5\text{-}C_5Me_4)(\eta^5\text{-}C_5H_4)\}Cl_2]$ (M = Zr, Hf), **656**, 129
Hafnium imido complexes
Hafnium imido complexes containing silyl ligands, **643-644**, 431
Hagihara coupling
Syntheses and structures of monoplatinum model complexes for diplatinum polyynediyl adducts $L_nPt(C{\equiv}C)_2PtL_n$, **641**, 53

Half-metallocene
Syndiotactic polystyrene with very high molecular weight produced by sterically and electronically modified catalyst, **655**, 186
Half-sandwich
C_2-Bridged sandwich and half-sandwich entities with Ti(IV) and Cr(0) centers, **641**, 62
Half-sandwich complex
A new half-sandwich Yb(II) complex with the tridentate cyclopentadienyl ligand $[C_5H_4CH_2CH(O)CH_2OBu^n]^{2-}$: synthesis, self-assembly of a tetranuclear cubane-like framework $\{[(\eta^5\text{-}C_5H_4)CH_2CH(\mu^3{:}\eta^1\text{-}O)CH_2OBu^n]Yb\}_4$ and oxidative alkylation by Me_2Hg to the Yb(III) derivative $[(\eta^5\text{-}C_5H_4)CH_2CH(\eta^1\text{-}O)CH_2OBu^n]YbMe(THF)$, **647**, 94
Half-sandwich complexes
Dinuclear ansa zirconocene complexes containing a sandwich and a half-sandwich moiety as catalysts for the polymerization of ethylene, **658**, 259
Metalation of aromatic heterocycles by yttrium alkyl complexes that contain a linked amido-cyclopentadienyl ligand: synthesis, structure and Lewis base adduct formation, **647**, 158
Halide ligand
Ruthenium complexes with 2,2′-, 2,4′- and 4,4′-bipyridine ligands: The role of bipyridine coordination modes and halide ligands, **655**, 31
Halide ligands
Photosubstitution of the halide ligands (X^-) in $(\eta^5\text{-}C_5H_5)Fe(CO)(PPh_3)X$, **648**, 293
Halides
Synthesis and structure of monomeric and solvent-free $LPrX_2$ compounds supported by a new β-diketiminato ligand [L = $Et_2NCH_2CH_2NC(Me)CHC(Me)NCH_2CH_2NEt_2$, X = Cl, Br, BH_4], **643-644**, 47
Halogen exchange
Intramolecular cyclization of benzyl-substituted cyclopentadienyl titanium dichlorides promoted by boron tribromide, **645**, 59
α-Halogenoalkylstannanes
New synthetic approach and structural characterization of the chloroalkylstannanes $(Cl-CH_2)_n\ SnCl_{4-n}$ ($n = 2, 4$) and the hydrolysis product $[(ClCH_2)_2Sn(Cl)-O-Sn(Cl)(CH_2Cl)_2]_2$, **646**, 138
Halosilanes
Synthesis of di- and trisilanes with potentially chelating substituents, **649**, 25
^1H and ^{13}C high-resolution and CP MAS-NMR spectroscopy
Chromium tricarbonyl complexes with biphenylene as η^6 ligand: synthesis, structure, dynamic behaviour in solid state and thermal η^6,η^6-haptotropic rearrangements. Experimental (NMR) and theoretical (DFT) studies, **656**, 27
^1H- and ^{13}C-NMR
Metal π complexes of benzene derivatives: Part 56. (η^6-Fluoranthene)(tricarbonyl)chromium: isomerism and haptotropic equilibration, **641**, 208
Haptotropic metal migration
Reactions of complex ligands: Part 94. Chromium-templated angular versus linear benzannulation of dibenzofuran and haptotropic metal migration in tetracyclic fused arenes, **641**, 185
Haptotropic rearrangement
Preparation, structures, and haptotropic rearrangement of novel dinuclear ruthenium complexes, $(\mu_2,\eta^3{:}\eta^5\text{-}guaiazulene)Ru_2(CO)_4(CNR)$, **650**, 96
Haptotropic rearrangements
Chromium tricarbonyl complexes with biphenylene as η^6 ligand: synthesis, structure, dynamic behaviour in solid state and thermal η^6,η^6-haptotropic rearrangements. Experimental (NMR) and theoretical (DFT) studies, **656**, 27
Metal π complexes of benzene derivatives: Part 56. (η^6-Fluoranthene)(tricarbonyl)chromium: isomerism and haptotropic equilibration, **641**, 208
Hauser base
Synthesis, characterization and crystal structures of alkyl-, alkynyl-, alkoxo- and halo-magnesium amides, **648**, 176
1*H*-Cyclohept[*a*]azulene$Fe(CO)_3$
[8+2] Cycloaddition of 8-oxoheptafulvene with cycloheptatriene-$Fe(CO)_3$: synthesis of tricarbonyl[(2,3,4,5-η)-11-acetoxy-1*H*-cyclohept[*a*]azulene]iron, **642**, 80
Heck catalyst
Isolation and structural characterization of some stable Pd(II) carboxylate complexes supported by 1,1′-bis(diphenylphosphino) ferrocene (dppf), **658**, 159
Heck reaction
Cyclopalladated complexes of tertiary arylamines as highly efficient catalysts using in the Heck reactions, **651**, 146
Development of Pd–Cu catalyzed cross-coupling of terminal acetylenes with sp^2-carbon halides, **653**, 46
Heck reactions
Synthesis, characterization and catalytic activity in Heck-type reactions of orthometallated Pd^{II} and Pt^{II} complexes derived from (1*R*,2*R*)-1,2-diaminocyclohexane, **650**, 157
Hemiaminals
Reaction of $[RhCl(CO)_2]_2$ or $[RhCl(COD)]_2$ with *o*-(diphenylphosphino)benzaldehyde. Formation of hemiaminals in the subsequent reaction with dihydrazones, **648**, 149
Hemilabile ligands
Neutral and cationic (η^6-arene)-ruthenium(II) complexes containing the iminophosphorane–phosphine ligand $Ph_2PCH_2P(=N\text{-}p\text{-}C_5F_4N)Ph_2$: influence of the arene ring in catalytic transfer hydrogenation of cyclohexanone, **663**, 32
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, **643-644**, 237
Hemilability
Hemilability of the primary amine–metal bond in polyamine-(Group 6) metal carbonyl complexes, **664**, 214
1,3,6-Heptatriene
Zirconocene mediated cyclization and isomerization of 1,3,6-heptatriene, **663**, 13
Herbicidal activities
Synthesis and biological activity of novel cyanoacrylates containing ferrocenyl moiety, **655**, 182
Heteroaromatic ligands
Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, **643-644**, 424
Heteroaromatics
The directed *ortho* metalation—cross coupling symbiosis. Regioselective methodologies for biaryls and heterobiaryls. Deployment in aromatic and heteroaromatic natural product synthesis, **653**, 150
Heteroatom nucleophiles
Palladium-catalyzed cross-coupling reaction of organic halides with Grignard reagents, organolithium compounds and heteroatom nucleophiles, **653**, 27
Heterobimetallic
Reactions of cyclopentadienylmolybdenum compounds with bismuth alkoxides, **641**, 9
Towards f and d electron interactions in amido metal complexes, **647**, 12
Heterobimetallic complexes
New half-sandwich heterobimetallic CpMPt (M = Rh, Ir) dithiolato bridged complexes. X-ray structure of $[(PPh_3)_2Pt(\mu\text{-}S(CH_2)_2S)RhCl(\eta^5\text{-}C_5H_5)]BF_4$, **662**, 188

Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, **643-644**, 231
Heteroboranes
Heteroboranes of the p-block elements, **646**, 21
Heterocycle
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, **643-644**, 494
Heterocycles
Metalation of aromatic heterocycles by yttrium alkyl complexes that contain a linked amido-cyclopentadienyl ligand: synthesis, structure and Lewis base adduct formation, **647**, 158
Metal complexes of anionic 3-borane-1-alkylimidazol-2-ylidene derivatives, **641**, 195
Novel organotin halides. Organometallic substituted stannoles and alkene derivatives with tin–chlorine and tin–bromine bonds—exceptionally small magnitude of coupling constants $|^1J(^{119}Sn, ^{13}C)|$, **646**, 125
Reactivity of some poly-1-alkynylsilicon and -tin compounds towards triallylborane—routes to novel heterocycles, **657**, 146
Synthesis of heterocycles by cyclization of unsaturated organolithiums: a review, **646**, 59
Heterocyclic
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Heterocyclic organic molecules
The reaction of $Co_2(CO)_8$ and $Co_4(CO)_{12}$ with the dipropargylamine $[(HC{\equiv}CCMe_2)_2NMe]$. Synthesis and crystal structure of the complex $Co_4(CO)_{10}(\mu\text{-}CO)[H_2C{=}CC(Me)_2N(Me)C(Me_2)C\text{-}(\mu_4\text{-}C)]$, **656**, 57
Heterocyclic ring containing cyclomercurated ferrocenylimine
Studies on the synthesis and structural characterization of cyclomercurated ferrocenylimines containing heterocyclic ring, **660**, 139
Heterodiene
1,4-Diaza-1,3-diene (DAD) complexes of early transition metals. Synthesis and structural characterization of (*t*-Bu-DAD)$ZrCl(\mu\text{-}Cl)_3Zr$(*t*-Bu-DAD)(THF) and its reaction with benzophenone, **648**, 87
Heteroleptic complexes
$[(Tp'^{-Bu,Me})Yb(\mu\text{-}H)]_2$: a fecund precursor to a host of divalent, hydrotris(pyrazolyl)borate supported f-element complexes, **647**, 84
Heteroleptic magnesium amides
Synthesis, characterization and crystal structures of alkyl-, alkynyl-, alkoxo- and halo-magnesium amides, **648**, 176
Heterometallic
Synthesis and structural characterisation of 'solvent-free' lithium–calcium hexamethyldisilazide, $[Li\{\mu\text{-}N(SiMe_3)_2\}_2Ca\{N(SiMe_3)_2\}]$, exhibiting a double ration of agostic $H_3C\cdots Li$ and $H_3C\cdots Ca$ intramolecular interactions, **648**, 288
Heteronuclear coupling constants
Regio- and stereoselective addition of sterically hindered silylboranes to terminal alkynes, **646**, 179
Hexacoordinated phosphorus
Diastereoselective synthesis of C_2-symmetric hexacoordinated phosphate anions (HYPHATs) with predetermined chirality from 1,2-diaryl-ethane-1,2-diols, **643-644**, 392
Hexacoordination
Synthesis and structural behavior of the P-functional organotin chlorides $[Ph_2P(CH_2)_3]_2SnCl_2$, $Ph_2P(CH_2)_3SnCl_2Me$, and $Ph_2P(CH_2)_nSnCl_3$ ($n = 2, 3$), **650**, 25
Hexasilanes
Dihydroxyoligosilanes as novel ligands in coordination chemistry—first synthesis of 2,5-dioxa-3,4-disilatitanacyclopentanes, **662**, 1
HF/LANL2DZ
A comparative study on structures and theoretical models of Rh azido complexes, **654**, 170
HF/SDD calculations
A comparative study on structures and theoretical models of Rh azido complexes, **654**, 170
High density polyethylene (HDPE)
Synthesis and evaluation of substituted pyrazoles palladium(II) complexes as ethylene polymerization catalysts, **660**, 108
High molecular weight
Syndiotactic polystyrene with very high molecular weight produced by sterically and electronically modified catalyst, **655**, 186
High pressure
Raman and infrared spectra and pressure tuning Raman and infrared spectra of multinuclear metal carbyne complexes, **648**, 93
High pressure NMR
Investigation of the hydroformylation of ethylene in liquid carbon dioxide, **650**, 249
High-throughput-screening
C–C Cross-coupling reactions for the combinatorial synthesis of novel organic materials, **653**, 200
Hindered naphthyl rotation
Rhodium complexes of 3,4-di(β-naphthyl)-2,5-diarylcyclopentadienone: indirect detection of slowed naphthyl rotation, **656**, 243
Hiyama coupling
How I came across the silicon-based cross-coupling reaction, **653**, 58
Homoallylzincs
A convergent total synthesis of pumiliotoxins A and B via palladium-catalyzed cross-coupling reaction of homoallylic organozinc compounds with vinyl iodides, **653**, 229
Homo- and heterobinuclear
Synthesis of Group 10 polyfluorothiolate mono- and bi-nuclear complexes. Crystal structures of $[Ni(SC_6HF_4)_2(dppe)]$, $[(dppe)Ni(\mu\text{-}SC_6HF_4)_2Pd(C_6F_5)_2]$ and $[(dppe)Ni(\mu\text{-}SC_6F_5)_2Pd(C_6F_5)_2]$, **663**, 98
Homoannular alkylation
Synthesis of 'three-petal' carbocyclic systems based on *s-cis*-diferrocenyltrienes, **649**, 86
Homoaromaticity
Very strong anionic homoaromaticity in (*deloc*-1,3,4)-1-sila-3,4-diboracyclopentane-1-ides, the importance of the energy of the reference system for homoaromatic stabilization energies, **646**, 262
Homochiral cyclopalladated complexes
Homochiral cyclopalladated complexes of (*S*)-4-*tert*-butyl-2-phenyl-2-oxazoline. X-ray study of (*S,S*)-di-μ-chlorobis-{2-[2-(4-*tert*-butyl)oxazolinyl]phenyl-*C,N*}dipalladium(II), **654**, 66
Homogeneous and heterogeneous ethylene polymerization
Dinuclear ansa zirconocene complexes containing a sandwich and a half-sandwich moiety as catalysts for the polymerization of ethylene, **658**, 259
Homogeneous catalysis
Acid controlled alkyne dimerisation initiated by a Ru–carbene precursor, **659**, 159
Development of new palladium catalysts for the alkoxycarbonylation of aryl chlorides, **641**, 30
Homogeneously catalysed isomerisation of allylic alcohols to carbonyl compounds, **650**, 1
Niobium, titanium, zirconium and hafnium complexes incorporating germanium bridged *ansa* ligands. X-Ray crystal structures of $[Zr\{Me_2Ge(\eta^5\text{-}C_5Me_4)_2\}Cl_2]$ and $[M\{Me_2Ge(\eta^5\text{-}C_5Me_4)(\eta^5\text{-}C_5H_4)\}Cl_2]$ (M = Zr, Hf), **656**, 129
Phosphametallocenes: from discovery to applications, **646**, 15
Synthesis of 1,2-bis[(diorgano)phosphino]ethanes via Michaelis–Arbuzov type rearrangements, **646**, 230

Homogenous catalysis
Catalytic reduction of acetophenone with transition metal systems containing chiral bis(oxazolines), **659**, 186
Homolytic substitution
Spin chemistry of organometallic compounds: 2. Interaction of *N*-bromohexamethyldisilazane with allyltriorganolsilanes, **658**, 228
Horner reaction
Synthesis of P-chiral enephosphonic acid derivatives, **662**, 83
2*H*-1,2-Oxaphosphorin 2-oxide
Synthesis of 2H-1,2-oxaphosphorin 2-oxides, **646**, 153
$H_3PMo_{12}O_{40}$
Highly selective synthesis of biphenyl by the $Pd(OAc)_2$/HPA/O_2/AcOH catalyst system, **664**, 59
HR MAS NMR
Palladium cross-coupling reactions on solid support using a new silylated linker, **643-644**, 512
Hybrid ligands
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, **643-644**, 181
Hybrid material
Organic–inorganic hybrid materials containing metal phosphine complexes: Evidence for preferential *cis* configuration of Pd(II) and Pt(II) complexes within the materials, **643-644**, 453
Hydrazine
A novel and convenient synthesis towards 2-pyridylselenium compounds: X-ray crystal structure of 4,4′-dimethyl-2,2′-dipyridyl diselenide and tris(2-pyridylseleno)methane, **658**, 71
Hydrazones
A facile and diastereoselective access to substituted cyclopentanones from Fischer alkenyl carbene complexes and 1-amino-1-azadienes, **643-644**, 363
Intramolecular C–N bond formation in the reductive elimination of *ortho*-palladated arylhydrazones of acetophenone, **658**, 15
Hydrazonide
Hydrazonide titanium derivatives: Synthesis, characterization and catalytic activity in olefin polymerization. Molecular structure of $[Ti(\eta^5\text{-}C_5H_4SiMe_3)Cl(\mu\text{-}N_2CPh_2)]_2$, **663**, 173
Hydride
The syntheses and structures of coordinatively unsaturated aryloxyhydride complexes of molybdenum, $Mo(PMe_3)_4(OAr)H$: reversible C–H bond activation and comparison with their tungsten analogues, **652**, 37
The unusual reaction of $Ga(C_5Me_5)_3$ with a nucleophilic carbene, **643-644**, 487
$[(Tp^{t\text{-}Bu,Me})Yb(\mu\text{-}H)]_2$: a fecund precursor to a host of divalent, hydrotris(pyrazolyl)borate supported f-element complexes, **647**, 84
Hydride complex
Tris(*N*-pyrrolyl)phosphine complexes of osmium(II) and osmium(0), **643-644**, 168
Hydride complexes
A tertiary phosphine that is too bulky: preparation of catalytically less active carbene and vinylidene ruthenium(II) complexes, **641**, 203
Ruthenium hydrides bearing $SbPh_3$ and $AsPh_3$ ligands: characterization of the bis(dihydrogen) complexes $[Cp^*Ru(H_2)_2(EPh_3)]^+$ ($Cp^* = C_5Me_5$; E = Sb, As), **663**, 151
β-Hydride elimination
Observation of non-chelated bis(pentamethylcyclopentadienyl)zirconium-alkyl–alkene complexes is thwarted by competitive arene or amine coordination or by β-hydride elimination, **642**, 120
Hydrides
A study of the coordination ability of 2,5-di(2-pyridyl)phospholes on Ru centres, **663**, 118
Hydridocarbonylchromates
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of $[PPN]^+[CH_3CH(COOEt)Cr(CO)_5]^-$, **643-644**, 27
Hydridotris(1-pyrazolyl)borate
Synthesis and X-ray structures of hydridotris(1-pyrazolyl)borate carbonyl complexes of ruthenium, **648**, 193
Hydroalumination
Syntheses of polyaluminium compounds by hydroalumination reactions, chelating Lewis acids possessing two and four coordinatively unsaturated aluminium atoms, **664**, 110
Hydroamination reaction
Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, **643-644**, 4
Hydroboration
Synthesis, characterisation and molecular structure of $[Rh(COE)_2(acac)]$ (COE = cyclooctene, $\eta^2\text{-}C_8H_{14}$), an important starting material for the preparation of rhodium catalyst precursors, **649**, 199
Hydrododecaborate
Synthesis of $[B_{12}H_{12}]^{2-}$ based extractants and their application for the treatment of nuclear wastes, **657**, 83
Hydroesterification
Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, **643-644**, 12
Hydroformylation
Investigation of the hydroformylation of ethylene in liquid carbon dioxide, **650**, 249
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, **643-644**, 98
Polyether phosphine oxide induced phase separable homogeneous catalysis for hydroformylation of higher olefins, **664**, 1
Polyether phosphite for hydroformylation of higher olefins in non-aqueous system and catalyst recovery, **654**, 83
Site-selective phosphorylation of arylphospholes through reaction with phosphorus tribromide, **643-644**, 32
Supported organometallic complexes: Part XXX. Hydroformylation of 1-hexene in interphases — the influence of different kinds of inorganic–organic hybrid co-condensation agents on the catalytic activity, **641**, 165
Hydrogenation
Asymmetric hydrogenation of 1-phenylethenylboronic acid and esters for the synthesis of chiral organoboron compounds, **642**, 145
Hydrogen bond
Dihydrogen bonding of decahydro-*closo*-decaborate(2–) and dodecahydro-*closo*-dodecaborate(2–) anions with proton donors: experimental and theoretical investigation, **657**, 155
Synthesis and reactivity of transition metal complexes containing halogenated boryl ligands, **649**, 9
Hydrogen-bonding
Ferrocenyl hydroxymethylphosphines $(\eta^5\text{-}C_5H_5)Fe[\eta^5\text{-}C_5H_4P(CH_2OH)_2]$ and 1,1′-$[Fe\{\eta^5\text{-}C_5H_4P(CH_2OH)_2\}_2]$ and their chalcogenide derivatives, **658**, 181
Hydrogen bonding
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, **643-644**, 313
X-ray crystal structures of novel platinum(II) and palladium(II) complexes of dialkyl phosphonated phosphines, **649**, 113
Hydrogen bridging
Alkylderivatives of Stanna-*closo*-dodecaborate, **664**, 116
β-Hydrogen elimination
Theoretical studies on the β-hydrogen elimination reactions of palladium and platinum alkoxide complexes containing bidentate ligands, **662**, 120

β-Hydrogen migration
Specific solvent effect on R_2ZrCl_2 (R = butyl, ethyl) reactivity, a density functional study, **664**, 268
Hydrogen transfer
'Diopium', a chiral phosphoniophosphine derived from Kagan's diop. Rhodium complexes and reducing catalytic properties, **654**, 180
Oxidation of primary and secondary alcohols catalyzed by a pentamethylcyclopentadienyliridium complex, **649**, 289
Transition metal hydrides as active intermediates in hydrogen transfer reactions, **652**, 105
Hydrolisis
Reaction of ketenylidenetriphenylphosphorane, $Ph_3PC{=}C{=}O$, with water: formation of methyltriphenylphosphonium hydrogencarbonate, **642**, 64
Hydrolysis
Organic–inorganic hybrid materials containing metal phosphine complexes: Evidence for preferential *cis* configuration of Pd(II) and Pt(II) complexes within the materials, **643-644**, 453
Tetrakis[lithium-*tert*-butyl(di-*tert*-butylfluorosilyl)amide]-dilithium oxide, $(^tBu_2SiF{-}NLi^tBu)_4Li_2O$—a Li_6O^{4+}-cluster, **646**, 134
The reaction of samarium(II) with manganese carbonyl: unexpected conversion of CO to formate. X-ray crystal structures of $[Sm(Tp^{Me2})_2]Mn(CO)_5$ and $\{[Sm(Tp^{Me2})_2]_2(\mu\text{-}HCO_2)\}Mn(CO)_5$ (Tp^{Me2} = HB(3,5-dimethylpyrazolyl), **664**, 298
Hydrolysis of Si–OTf
1-Triflato-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane and 1,3-bis-triflato-5,7-dimethyl-1,3,5,7-tetrasilaadamantane; synthesis, complexation study and X-ray structure of 1-hydroxy-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane, **658**, 141
Hydrometallation–cross-coupling tandem
A genealogy of Pd-catalyzed cross-coupling, **653**, 34
Hydrosilanes
Silane-induced ring-opening polymerization of 1,1,3,3-tetramethyl-2-oxa-1,3-disilacyclopentane catalyzed by a triruthenium cluster, **660**, 145
Hydrosilylation
Hydrosilylation of alkynes catalyzed by platinum on carbon, **645**, 1
Hydrosilylation of alkynylsilanes utilizing organolanthanide and Group 3 metallocene complexes, **647**, 225
Hydrosilylation reactions of tetramethyldisilazanes and their derivatives, **655**, 115
Iminophosphines: synthesis, formation of 2,3-dihydro-1*H*-benzo[1,3]azaphosphol-3-ium salts and *N*-(pyridin-2-yl)-2-diphenylphosphinoylaniline, coordination chemistry and applications in platinum group catalyzed Suzuki coupling reactions and hydrosilylations, **650**, 231
New P,N ligands with chiral nitrogen center: applications in homogeneous catalysis, **643-644**, 98
Ruthenium-catalyzed hydrosilylation of terminal alkynes: stereodivergent synthesis of (*E*)- and (*Z*)-alkenylsilanes, **645**, 192
Synthesis of polysilanes bearing pendant carbosilyl groups and ^{29}Si-NMR probe on the tacticity using side chain silicon atoms, **650**, 223
Hydrostannation
Regioselective hydrostannations catalyzed by molybdenum isonitrile complexes, **641**, 26
Stereoselective hydrostannation of substituted alkynes with trineophyltin hydride, **650**, 173
Hydrotris(pyrazolyl)borate
$[(Tp'^{-Bu,Me})Yb(\mu\text{-}H)]_2$: a fecund precursor to a host of divalent, hydrotris(pyrazolyl)borate supported f-element complexes, **647**, 84
Hydroxy and dihydroxy derivatives
Syntheses of the $B_{(8)}$-hydroxy- and $B_{(8,8')}$-dihydroxy-derivatives of the bis(1,2-dicarbollido)-3-cobalt(1-)ate ion by its reductive acetoxylation and hydroxylation: molecular structure of $[8,8'\text{-}\mu\text{-}CH_3C(O)_2{<}(1,2\text{-}C_2B_9H_{10})_2\text{-}3\text{-}Co]^0$ zwitterion determined by X-ray diffraction analysis, **649**, 181
Hydroxyferrocene
Hydroxyferrocene as a prochiral analog of phenols: cyclopalladation of a mixed phosphite ester of hydroxyferrocene, **642**, 236
Hydroxyketone
Oxidation of ketone by palladium(II). α-Hydroxyketone synthesis catalyzed by a bimetallic palladium(II) complex, **659**, 50
Hydroxylamine
Synthesis, structure and reactivity study of 1,1′-bis(*N*-*ter*-butyl-*N*-hydroxyamino)ferrocene, **654**, 210
Hydroxymethylphosphines
Ferrocenyl hydroxymethylphosphines $(\eta^5\text{-}C_5H_5)Fe[\eta^5\text{-}C_5H_4P(CH_2OH)_2]$ and $1,1'\text{-}[Fe\{\eta^5\text{-}C_5H_4P(CH_2OH)_2\}_2]$ and their chalcogenide derivatives, **658**, 181
2-Hydroxypyridine
Dimeric cyclopalladated azobenzenes: structural differences between 2-hydroxypyridine and 2-mercaptopyridine bridged complexes, **650**, 202
Hyperconjugation
Carbon–silicon hyperconjugation: X-ray structural study of *N*-methyl-4-trimethylsilylmethylpyridinium triflate, **659**, 10
Hypercoordinate silicon
$P(MeNMCH_2CH_2)_3N$: an effective catalyst for trimethylsilycyanation of aldehydes and ketones, **646**, 161
Hypercoordination
Interactions of chloromethyldisilanes with tetrakis(dimethylamino)ethylene (TDAE), formation of $[TDAE]^{\bullet+}$ $[Si_3Me_2Cl_7]^-$, **662**, 14
Observation of inter- and intramolecular C–H···F hydrogen bonding in Gingras' salt: $[n\text{-}Bu_4N]^+[Ph_3SnF_2]^-$, **648**, 204
Some aspects of chemistry of the N → Si chelated aryloxydihydrosilanes $R(ArO)SiH_2$(R=Ph, ArO) and of the 2,2-diaryloxytrisilane $(Me_3Si)_2Si(OAr)_2\{ArO{=}2,4,6\text{-}[(CH_3)_2NCH_2]_3C_6H_2O\}$, **658**, 94
Hyperpolarizability
Organometallic complexes for nonlinear optics: Part 25. Quadratic and cubic hyperpolarizabilities of some dipolar and quadrupolar gold and ruthenium complexes, **642**, 259
Hyper-Raleigh scattering
Chiral organometallic chromophores for nonlinear optics derived from $[Fe_2(\eta^5\text{-}C_5H_5)_2(CO)_2(\mu\text{-}CO)(\mu\text{-}C{-}CH_3)]^+$ $[BF_4]^-$, **655**, 70
Hypervalency
Multinuclear NMR and X-ray diffraction study of pentacoordinated siloxane structures derived of pyridine diols, **648**, 280
Hypervalent
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), **643-644**, 441
Hypervalent bonds
Syntheses, structure, and Berry pseudorotation of ruthenium-, iron-, and cobalt-phosphorane complexes, **646**, 204
Hypervalent silicon
Mechanistic studies on the reactions of trimethylsilanide and trimethylstannylide ions with haloarenes in hexamethylphosphoramide, **656**, 108
Hypho cluster
Azanonaborane-pyridine derivatives $[(R'C_5H_4N)B_8H_{11}NHR'']$: synthesis, structure and some molecular-orbital calculations, **657**, 205
Hypophosphite ester
A novel and convenient preparation of hypophosphite esters, **643-644**, 154

ICl–AgOTf
1-Triflato-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane and 1,3-bis-

triflato-5,7-dimethyl-1,3,5,7-tetrasilaadamantane; synthesis, complexation study and X-ray structure of 1-hydroxy-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane, **658**, 141
Imidato ligands
Photosubstitution of the halide ligands (X^-) in (η^5-C_5H_5)Fe(CO)-(PPh_3)X, **648**, 293
Imidazoline
Synthesis of novel chiral bis(ferrocenyl) ligands and their use as voltammetric metal cation sensors, **656**, 211
Imidazolinium salt
Synthesis of bis-oxazoline-ruthenium(II)-arene complexes. Combined catalytic isomerisation and Claisen rearrangement of bis-allyl ether, **662**, 63
Imidazolium salts
Synthesis and crystal structure of *N*-heterocyclic carbene complex of silver, **654**, 233
Imido complexes, organometallic
Dimers of highly π-loaded organoimido d^1 metal radicals of niobium, tantalum, molybdenum, tungsten, and rhenium: the context of the cyclopentadienyl imido ligand analogy, **655**, 96
Imido derivatives
Imido analogs of aluminophosphates: syntheses and X-ray structures of $\{LiAl[OP(N^tBu)_2(NH^tBu)]_2\}_2$ and the mono- and di-methylaluminum complexes of the anions $[OP(N^tBu)_x(NH^tBu)_{3-x}]^{x-}$ ($x = 1, 2$), **646**, 107
Imidodiphosphinato ligands
Phenylantimony(III) derivatives of tetraphenyldichalcogenoimidodiphosphinic acids. Crystal and molecular structure of $PhSb[(XPPh_2)(SPPh_2)N]_2$ (X = O, S), **642**, 113
Imidotetraphenyldiphosphinic acid
A mixed-valence dimanganese complex synthesized from the $[Ph_2P(O)NP(O)Ph_2]^-$ anion with $[BrMn(CO)_5]$, **645**, 54
Imine
Ligand effect on the cationic palladium complexes in polymerization of vinyl ethers, **656**, 199
Imines
Cyclopalladation of Schiff bases from phenylalanine and 2-phenylglicine, **663**, 277
Hemilability of the primary amine–metal bond in polyamine-(Group 6) metal carbonyl complexes, **664**, 214
Iminium tetraphenylborates
Reactivity of ammonium and iminium tetraphenylborates towards Pd(0)-complexes: selective allyl or proton transfer to Pd(0). Evidence of formation of the species $[HPd(dppe)_2][BPh_4]$, **662**, 112
Imino-phosphine
Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, **643-644**, 4
Iminophosphines
Iminophosphines: synthesis, formation of 2,3-dihydro-1*H*-benzo[1,3]azaphosphol-3-ium salts and *N*-(pyridin-2-yl)-2-diphenylphosphinoylaniline, coordination chemistry and applications in platinum group catalyzed Suzuki coupling reactions and hydrosilylations, **650**, 231
Iminophosphoranes
Neutral and cationic (η^6-arene)-ruthenium(II) complexes containing the iminophosphorane–phosphine ligand $Ph_2PCH_2P(=N$-p-$C_5F_4N)Ph_2$: influence of the arene ring in catalytic transfer hydrogenation of cyclohexanone, **663**, 32
Inclusion compounds
Synthesis and characterization of the inclusion compound of a methyltrioxorhenium(VII) adduct of 4-ferrocenylpyridine with β-cyclodextrin, **656**, 281
Indacen-4,8-dione
Synthesis and properties of homoannularly- and heteroannularly carbonyl-bridged binuclear ruthenocene derivatives, **648**, 72
Indazol
Structural and dynamic studies in solution of anionic dinuclear azolato-bridged palladium(II) complexes, **663**, 108
Indenyl
Mono-indenyl and cyclopentadienyl derivatives of molybdenum(IV) with a 16 valence-electron configuration, **663**, 78
Preparation, characterization, and reactivities of thienyl nickel complexes bearing indenyl ligands, **660**, 98
Silyl derivatives of ferrocene with pending indenyl or fluorenyl substituents at silicon, **656**, 71
2-Indenyl
Novel 2-indenyl *ansa*-zirconocenes for the polymerization of α-olefins, **654**, 29
Indenyl
Cyclopentadienyl, indenyl, and fluorenyl complexes of sodium with 15-crown-5, **649**, 50
Indenyl amido titanium dimethyl complexes
Indenyl-amido titanium and zirconium dimethyl complexes: improved synthesis and use in propylene polymerization, **664**, 5
Indenyl complexes
Synthesis and characterization of 2-oxacycloalkylideneruthenium(II) complexes: X-ray crystal structure of the 2-oxacycloheptylidene complex $[Ru\{=\overline{COCH_2(CH_2)_3C}H_2\}(\eta^5$-$C_9H_7)(PPh_3)_2][PF_6]\cdot CH_2Cl_2$, **651**, 22
Indenyl ligands
Zirconium bis-indenyl compounds. The influence of substituents on the ethene polymerization behavior of 1- and 2-substituted $(R$-$Ind)_2ZrCl_2$/MAO catalysts, **642**, 195
Indium
Cp^*GaCl_2 and Cp^*_2GaCl ($Cp^* = \eta^1$-C_5Me_5) as starting materials for novel Group 13 element complexes, **646**, 247
Indium halide
Structural and spectroscopic studies of carbene and N-donor ligand complexes of Group 13 hydrides and halides, **656**, 203
Indole
Oxidative insertion into the N–H bond of carbazole, indole and pyrrole with zerovalent metals, **664**, 170
Induced circular dichroism
4-Ferrocenyl-1,3-oxazoline derivatives as ligands for catalytic asymmetric allylation reactions, **660**, 62
Infrared
Raman and infrared spectra and pressure tuning Raman and infrared spectra of multinuclear metal carbyne complexes, **648**, 93
Infrared spectra
A new method for calculating the CO-factored force constants of pentacarbonyliron, **658**, 176
Infrared spectroscopy
A tetrameric copper(I) alkoxide with a π-tethered ligand: 2-allyl-6-methylphenoxocopper(I), **649**, 204
Inorganic heterocycle
Osmacycles containing the $\{(Ph_2PE)_2N\}^-$ ligand (E = S or Se): synthesis and crystal structures, **664**, 85
Insertion
Coupling reactions of manganese(I) cyclometallated compounds derived from heterocyclic N-donor ligands with alkynes, **656**, 270
Insertions into lanthanide–ligand bonds in organolanthanide chemistry, **647**, 28
Reactions of cyclomanganated complexes with carbon disulfide: routes to η^2-aryldithiocarboxylate-$Mn(CO)_4$ complexes and to the trithiocarbonate complex $(\mu_3$-$CS_3)_2Mn_4(CO)_{16}$, **664**, 288
Synthesis, structure and reactivity of *tert*-butyldimethylsilylcyclopentadienyl lanthanide chlorides, including crystal structures of $[(C_5H_4SiMe_2Bu^t)_2Gd(\mu$-$Cl)]_2$ and $(C_5H_4SiMe_2Bu^t)_2Er(SBT)$-(THF), **655**, 120

Insertion mechanism
The marked influence of steric and electronic properties of ancillary pyridylthioether ligands on the rate of allene insertion into the palladium–carbon bond, **650**, 43
Insertion reactions
Catalytic transformations of diazo compounds promoted by platinum(0) and dicationic platinum(II) complexes, **642**, 32
$\pi-\pi$ Interactions
Synthesis of Group 10 polyfluorothiolate mono- and bi-nuclear complexes. Crystal structures of $[Ni(SC_6HF_4)_2(dppe)]$, $[(dppe)Ni(\mu\text{-}SC_6HF_4)_2Pd(C_6F_5)_2]$ and $[(dppe)Ni(\mu\text{-}SC_6F_5)_2Pd(C_6F_5)_2]$, **663**, 98
Inter- and intramolecular C–H···π interactions
Difluorenylsilane derivatives, a class of compounds exhibiting strong intra- and intermolecular C–H···π interactions. Crystal and molecular structures of bis(9-methylfluoren-9-yl)dimethylsilane and (9-methylfluoren-9-yl)(fluoren-9-yl) dimethylsilane, **659**, 95
Interannular rotation
Structure–property relationships in phosphole oligomers: a theoretical insight, **643-644**, 194
Intermediates
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Intermolecular bonds
Crystal and molecular structure of (α-naphthyl)TeI_3, **664**, 306
Intermolecular C–H···O hydrogen bonds
$C(sp^3)$–H···O and $C(sp^2)$–H···O hydrogen bonds in acyclic- and cyclic-organotellurium carboxylates, **649**, 70
Intermolecular secondary bonds
Synthesis, spectroscopic characterisation of 1,1,2,3,4,5,6-heptahydro-1,1-di(carboxylato)telluranes and 1,3-dihydro-2λ^4-benzotellurole-2,2-diyl dicarboxylates: Crystal structures of 1,1,2,3,4,5,6-heptahydro-1,1-di(benzoato)tellurane and 1,3-dihydro-2λ^4-benzotellurole-2,2-diyl dibenzoate, **658**, 34
Internal alkyne
Platinum complex catalyzed reaction of tributyltin cyanide with alkynes, **660**, 173
Internally functionalized oxime
Synthesis, spectroscopic and structural aspects of some tetraorganodistannoxanes with internally functionalized oxime. 2. Crystal and molecular structure of $[\{Me_2Sn(ON{=}C(Me)C_5H_4N)\}_2O\}]_2 \cdot 2[2\text{-}NC_5H_4(Me)C{=}NOH]$, **664**, 66
Interpretation
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Intra- and intermolecular cyclobutadiene formation
Interaction of cyclic thiadiynes with CpCo(COD) — selectivity and reactivity, **641**, 3
Intramolecular 1,3-carbanionic rearrangement
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, **643-644**, 237
Intramolecular carbolithiation
Synthesis of heterocycles by cyclization of unsaturated organolithiums: a review, **646**, 59
Intramolecular coordination
Intramolecular coordination of Ln–O and Ln–N bonds in some new substituted lanthanocene complexes, **647**, 100
Synthesis and characterization of monomeric diorganotellurium dihalides: crystal and molecular structures of diphenacyltellurium dibromide and -diiodide, **658**, 169
Intramolecular cyclization
Intramolecular cyclization of benzyl-substituted cyclopentadienyl titanium dichlorides promoted by boron tribromide, **645**, 59
Intramolecular cycloadditions
Synthesis of unsymmetrical 1,1′-disubstituted ferrocenes. Formation of ferrocenophanes via intramolecular cycloaddition, **654**, 117
Intramolecular interactions
Intramolecular interactions in 2,6-pyridylacetylenes and their $Co_2(CO)_4$dppm complexes, **648**, 251
Synthesis and structural characterisation of 'solvent-free' lithium–calcium hexamethyldisilazide, $[Li\{\mu\text{-}N(SiMe_3)_2\}_2Ca\{N(SiMe_3)_2\}]$, exhibiting a double ration of agostic $H_3C\cdots$Li and $H_3C\cdots$Ca intramolecular interactions, **648**, 288
Iodide
Synthesis and reactions of the cationic seven-coordinate complexes, $[MoI(CO)_3(NCR)\{Ph_2P(CH_2)_nPPh_2\}][BF_4]$ (R = Me, $n = 1$, 2 and 3; R = Et, $n = 1$). Crystal structures of $[MoI_2(CO)_2(PPh_3)\{Ph_2P(CH_2)PPh_2\}]$, $[MoI(CO)_2\{Ph_2P(CH_2)PPh_2\}_2][BF_4]\cdot CH_2Cl_2$, $[MoCl_3O\{Ph_2PO(CH_2)OPPh_2\}]$ and $[Mo_3(\mu_3\text{-}I)_2\{\mu_2\text{-}Ph_2P(CH_2)PPh_2\}_3]I$, **664**, 45
Iodinated ligands
Retention of the B(3)–X (X = Br, I) bond in *closo*-*o*-carborane derivatives after nucleophilic attack. The first synthesis of [3-X-7-R-7,8-*nido*-$C_2B_9H_{10}]^-$ (X = Br, I). Crystal structure of $[HNMe_3][3\text{-}I\text{-}7,8\text{-}nido\text{-}C_2B_9H_{11}]$, **657**, 217
Iodine
Syntheses and crystal structures of a covalent trialkylantimony hydroxo bromide and related trialkylantimony(V) halides, **648**, 33
The B–I activation in *o*-carborane clusters: their fate towards B–H. Easy synthesis of $[7,10\text{-}C_2B_{10}H_{13}]^-$, **642**, 16
Iodo
3,3-Dimethyl-1-butyne complexes of tungsten(II). Crystal structures of $[WI_2(CO)(NCPh)(\eta^2\text{-}HC_2Bu^t)_2]$ and $[WI_2(CO)\{P(OR)_3\}_2(\eta^2\text{-}HC_2Bu^t)]$ (R = Me and Et), **658**, 77
Nitrile exchange reactions of $[WI(CO)(NCMe)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$; X-ray crystal structures of $[WI(CO)(L)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$ {L = NC^iPr, NC^tBu, $NCCH_2Ph$, 1,2-$C_6H_4(NCCH_2)_2$}, **664**, 37
Ionic liquid
Syntheses with organoboranes. XIII. Synthesis of ω-(4-bromophenyl)alkanoic acids and their borylation, **657**, 129
Ionic liquids
Pd–benzothiazole carbene catalysed carbonylation of aryl halides in ionic liquids, **645**, 152
Ion–molecule
Radiochemical study of the gas phase reaction of nucleogenic diethylsilylium ions with methanol and butanol, **656**, 258
Ion–molecule reactions
Kinetics of the gas phase reactions of the ion $C_5H_5Fe^+$ with substituted pyridines, **650**, 69
IR
Organotin(IV) derivatives of novel β-diketones: Part V. Synthesis and characterization of di- and triorganotin(IV) derivatives of 4-acyl-5-pyrazolones modified in position 3 of the pyrazole. Crystal structure of (1,3-diphenyl-4-benzoyl-pyrazolon-5-ato)triphenyltin(IV), **645**, 134
Iridium
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136
Iridium complex-catalyzed carbonylation of allylic phosphates, **651**, 137
Iridium-containing cumulenes: how to prepare and how to use, **661**, 137
Mixed-metal cluster chemistry: Part 20. Syntheses, crystal structures and electrochemical studies of $W_2Ir_2(\mu\text{-}L)(CO)_8(\eta^5\text{-}C_5H_4Me)_2$ (L = dppe, dppf), **650**, 133
New half-sandwich heterobimetallic CpMPt (M = Rh, Ir) dithiolato bridged complexes. X-ray structure of $[(PPh_3)_2Pt(\mu\text{-}S(CH_2)_2S)RhCl(\eta^5\text{-}C_5H_5)]BF_4$, **662**, 188

Strain in organometallics: synthesis of rhodium and iridium complexes with a novel rigid tetrachelating phosphine olefin ligand and their redox properties, **641**, 227
Synthesis and characterisation of derivatives of $[HIr_4(CO)_{10}(\mu\text{-}PPh_2)]$ with mono and diphosphines; X-ray molecular structures of $[HIr_4(CO)_8(PPh_3)_2(\mu\text{-}PPh_2)]$ and $[HIr_4(CO)_8\{Ph_2P\text{-}(CH_2)_nPPh_2\}(\mu\text{-}PPh_2)]$ ($n = 1$ and 4), **656**, 188
Iridium catalyst
Oxidation of primary and secondary alcohols catalyzed by a pentamethylcyclopentadienyliridium complex, **649**, 289
Iridium complexes
On the transferability of Ir–I bond enthalpies between $[Ir(\mu\text{-}S^tBu)(I)_2(CO)_2]_2$ and *trans*-$[Ir(X)(I)_2(CO)(PPh_3)_2]$ (X = F, Cl, Br, I) complexes, **662**, 105
The first metal complexes of bis(diisopropylamino)carbene: synthesis, structure and ligand properties, **649**, 219
Iridium(III)–silyl complex
Synthesis and characterization of the sterically hindered iridium(III)–silyl complex: $(Et_3P)_3(H)_2Ir[Si(H)Cl(C_6H_3\text{-}Mes_2\text{-}2,6)]$ and the generation of the cationic iridium(III)-silylene complex: $[(Et_3P)_3(H)_2Ir{=}Si(H)(C_6H_3\text{-}Mes_2\text{-}2,6)][B(C_6F_5)_4]$, **654**, 224
Iron
A structural isomer of the $[CoFe_3(CO)_{13}]^-$ anion, **645**, 281
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Carbonyl derivatives of iron(0) from the reaction of $FeR_2(bipy)_2$ (R = Me, Et) with carbon monoxide, **662**, 137
Chiral organometallic chromophores for nonlinear optics derived from $[Fe_2(\eta^5\text{-}C_5H_5)_2(CO)_2(\mu\text{-}CO)(\mu\text{-}C\text{–}CH_3)]^+$ $[BF_4]^-$, **655**, 70
cyclo-Hexaphosphane versus *cyclo*-hexaarsane fragmentation on a sulphur-capped mixed-metal dicobalt–iron skeleton, **642**, 237
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136
Dithiocarbamate derivatives of μ-thiocarbyne complexes: synthesis and X-ray molecular structure of $[Fe_2(\mu\text{-}CS)(\mu\text{-}CSMe)(\mu\text{-}S_2CNMe_2)Cp_2]$, **659**, 15
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, **643-644**, 125
Homo coupling, disproportionation and cross coupling of alkyl groups. Role of the transition metal catalyst, **653**, 11
Iron(II) complexes containing poly(1-pyrazolyl)methane ligands, **655**, 146
Late transition metal complexes bearing 2,9-bis(imino)-1,10-phenanthrolinyl ligands: synthesis, characterization and their ethylene activity, **658**, 62
New complexes with M–Si–O or M–Si–S linkages (M = Fe or Co), **648**, 237
Palladium(II) induced preferential activation of the $\sigma(C_{sp^3}\text{–}H)$ versus the $\sigma(C_{sp^2}$, ferrocene–H) bond of (S_C)-$[(\eta^5\text{-}C_5H_5)Fe\{(\eta^5\text{-}C_5H_4)\text{–}CH{=}N\text{–}CH(CO_2Me)CH_2\text{–}CH_2\text{–}SMe\}]$, **645**, 146
Phosphorus–hydrogen bond cleavage on a Ph_2PH-substituted μ_3-thioxo dicobalt–iron cluster as a route to bridging phosphido and thiophosphine ligands, **642**, 228
Preparation and organic transformation reactions of $CpFe(CO)_2SCO\text{–}3\text{-}C_6H_4\text{–}SO_2Cl$, **664**, 228
Reactions of acylferrate anion $[CH_3COFe(CO)_4]^-$ with methyl methyl iodide and acetylenes. Synthesis of mono- and dinuclear alkenyl ketone iron complexes. X-ray structure of $[NEt_4][I\text{-}Fe(CO)_3(COCPh)_2)]$, **642**, 107
Reactivity of *cyclo*-$(PhX)_6$ (X = As, P) towards $[M_3L_2(CO)_{10}]$ (M = Ru, L = CO or NCMe; M = Fe, L = CO), **664**, 27
Substitution reactions of $[\{Co(\eta^5\text{-}C_5H_5)\}_2\{Fe(CO)_2(PPh_3)\}(\mu_3\text{-}S)(\mu_3\text{-}CS)]$, **651**, 60
Synthesis and reactivity of transition metal complexes containing halogenated boryl ligands, **649**, 9
Synthesis and spectroscopic characterisation of compounds with formula $[\{Fe_2(SPh)_2(CO)_5\}Ph_2P(CH_2)_nPPh_2\{Fe(CO)_4\}]$ and $[\{Fe_2(SPh)_2(CO)_5\}_2Ph_2P(CH_2)_nPPh_2]$ ($n = 3$, 4 and 6), **642**, 40
Synthesis and structure of the novel mixed Sb/Se and Sb/Te containing iron carbonyl clusters $[Fe_3(\mu_3\text{-}Y)(\mu_3\text{-}SbMes)(CO)_9]$ (Y = Se, Te) and $[Fe_3(\mu_3,\eta^2{:}\eta^1\text{-}SeSbMes)(\mu_3\text{-}SbMes)(CO)_{10}]$, **658**, 204
Iron carbonyl complexes
Conversion of alkynes to cyclic imides and anhydrides using reactive iron carbonyls prepared from $Fe(CO)_5$ and $Fe_3(CO)_{12}$, **649**, 209
Iron carbonyls
Time-resolved photoelectron spectroscopy: A unique tool to monitor the vibrational and fragmentation dynamics of metal carbonyls, **661**, 191
Iron cluster
Formation of novel unsaturated fluorinated ligands by metal induced C–C coupling reaction of difluoroallene with fluoromethylidyne ligands of $Fe_3(CO)_9(\mu_3\text{-}CF)_2$, **641**, 215
Iron complexes
Structural studies of the $C_4H_8N_2Fe_2(CO)_6$ complex obtained by cyclization of acetaldazine in the presence of dodecacarbonyltriiron: investigations by X-ray diffraction and NMR of μ-1,2-(1,2-diaza-3-methylcyclopentane)diyl-bis(tricarbonyliron), **645**, 274
Synthesis, structure and reactivity of highly functionalized arsanyl- and stibanyl-diazomethanes, **643-644**, 81
Iron(II)- and cobalt(II)-complexes
New bis(imino)pyridine-iron(II)- and cobalt(II)-based catalysts: synthesis, characterization and activity towards polymerization of ethylene, **648**, 55
Iron(II) complexes
Preparation and properties of dinuclear bis[dicarbonyl(cyclopentadienyl)]diiron(II) complexes with S–S coupled, dimerized sulfur-rich dithiolate ligands, **645**, 94
Iron Lewis acid catalyst
Synthesis of a new iron Lewis acid catalyst possessing a chelating cyclopentadienyldiphenylphosphinite ligand, $(\eta^5{:}\eta^1\text{-}C_5H_4CH(Ph)OPPh_2)$, **654**, 202
Iron metal
A practical access to α-phosphonoenamides, **643-644**, 404
IR spectra
Coordination chemistry of polymercuramacrocycles. Complexation of cyclic trimeric perfluoro-*o*-phenylenemercury with neutral oxygeneous Lewis bases, **654**, 123
IR spectroscopy
Dihydrogen bonding of decahydro-*closo*-decaborate(2–) and dodecahydro-*closo*-dodecaborate(2–) anions with proton donors: experimental and theoretical investigation, **657**, 155
Reactions of methyl(phenyl)silylene with CO and PH_3—the formation of acid–base complexes, **641**, 156
Isocyanate
Structure of dialkyltin diaryloxides and their reactivity toward carbon dioxide and isocyanate, **659**, 133
Isocyanide
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)iminomethanes via possible generation of (amino)(boryl)carbene species, **643-644**, 508
Metal–coumarin complexes: synthesis and characterization of 7-isocyanocoumarin ligands and $Mo(CO)_4(7\text{-isocyanocoumarin})_2$ complexes. X-ray crystal structure of $Mo(CO)_4(7\text{-isocyano-4-trifluoromethylcoumarin})_2$, **642**, 97
Raman and infrared spectra and pressure tuning Raman and infrared spectra of multinuclear metal carbyne complexes, **648**, 93

Reactions of tetraphosphine complex [Mo{*meso*-*o*-C_6H_4($PPhCH_2$-CH_2PPh_2)$_2$}($Ph_2PCH_2CH_2PPh_2$)] with nitrile, CO, and isocyanide, **658**, 106
Isocyanides
Synthesis and X-ray structures of hydridotris(1-pyrazolyl)borate carbonyl complexes of ruthenium, **648**, 193
Isodicyclopentadienyl ligand
Syntheses and properties of some *exo*,*exo*-bis(isodicyclopentadienyl)titanium low-valent complexes, **656**, 81
Isomer
A structural isomer of the $[CoFe_3(CO)_{13}]^-$ anion, **645**, 281
Isomeric forms
The reactions of 4,6-dimethyl-2-mercaptopyrimidine with dimetallic compounds: diiron nonacarbonyl and cyclopentadienylmolybedenum tricarbonyl dimer, **655**, 49
Isomerisation
Homogeneously catalysed isomerisation of allylic alcohols to carbonyl compounds, **650**, 1
Synthesis and characterisation of derivatives of [$HIr_4(CO)_{10}$(μ-PPh_2)] with mono and diphosphines; X-ray molecular structures of [$HIr_4(CO)_8(PPh_3)_2$(μ-PPh_2)] and [$HIr_4(CO)_8$\{Ph_2P-$(CH_2)_n PPh_2$\}(μ-PPh_2)] ($n = 1$ and 4), **656**, 188
Isomerization
Catalytic isomerization of *N*-allylic substrates with chiral Os_3 clusters as potentially enantioselective reaction, **658**, 147
Reactivity of osmium–rhodium mixed-metal cluster [Os_3Rh(μ-$H)_3(CO)_{12}$] towards vinyl containing ligands, **659**, 151
The $Cl_2(PCy_3)$(IMes)Ru(=CHPh) catalyst: olefin metathesis versus olefin isomerization, **643-644**, 247
Isonitrile complexes
Preparation, structures, and haptotropic rearrangement of novel dinuclear ruthenium complexes, (μ_2,η^3:η^5-guaiazulene)R-$u_2(CO)_4$(CNR), **650**, 96
Isonitriles
Regioselective hydrostannations catalyzed by molybdenum isonitrile complexes, **641**, 26
Isoquinolines
Allylboration of functionalized isoquinolines, **657**, 123
Isotopic substitution
The metal–carbon bond in vinylidene, carbonyl, isocyanide and ethylene complexes, **661**, 181
Isoxazolyliodonium salt
1,3-Dipolar cycloaddition of alkynyliodonium salts with a nitrile oxide. Synthesis and reactivity of isoxazolyliodonium salts, **646**, 196

Janus Head ligands
Phosphane- and phosphorane *Janus Head* ligands in metal coordination, **661**, 111

Kabachnik–Fields reaction
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, **643-644**, 381
Ketenes
Reaction of ketenylidenetriphenylphosphorane, $Ph_3PC{=}C{=}O$, with water: formation of methyltriphenylphosphonium hydrogencarbonate, **642**, 64
Ketenylidenetriphenylphosphorane
Reaction of ketenylidenetriphenylphosphorane, $Ph_3PC{=}C{=}O$, with water: formation of methyltriphenylphosphonium hydrogencarbonate, **642**, 64
Ketimides
Synthesis of zirconocene amides and ketimides and an investigation into their ethylene polymerization activity, **656**, 63
Ketohydroazulene
The synthesis of a hydroazulen-2-one skeleton-determination of the diastereoselectivity of [3+2] cycloaddition of tricarbonyl[(4,5,6,7-η)-2-methyltropone]iron with *E*/*Z*-η^1-(crotyl)Fp, **659**, 43
Ketone synthesis
A reminiscence and a future prospect of transition metal-catalyzed cross-coupling processes, **653**, 5
Ketone trimethylsilylcyanation
$P(MeNMCH_2CH_2)_3N$: an effective catalyst for trimethylsilycyanation of aldehydes and ketones, **646**, 161
Kinetic resolution
Biocatalytic synthesis of optically active oxyfunctionalized building blocks with enzymes, chemoenzymes and microorganisms, **661**, 17
Kinetics
Chromium tricarbonyl complexes with biphenylene as η^6 ligand: synthesis, structure, dynamic behaviour in solid state and thermal η^6,η^6-haptotropic rearrangements. Experimental (NMR) and theoretical (DFT) studies, **656**, 27
Kinetics of the gas phase reactions of the ion $C_5H_5Fe^+$ with substituted pyridines, **650**, 69
Mechanism of the oxidative addition of Pd^0 complexes generated from $Pd^0(dba)_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, **643-644**, 416
One-electron oxidation of metal enolates and metal phenolates, **661**, 169
Substitution kinetics of $Cr(CO)_5$(η^2-*Z*-cyclooctene) with tetracyanoethylene, **658**, 274
Kitaigorodskii's *Aufbau* principle
The use of Kitaigorodskii's *Aufbau* principle in the solid-state study of crystalline borane compounds. A preliminary account, **657**, 20
Kumada–Tamao–Corriu reaction
Highly active, air-stable palladium catalysts for Kumada–Tamao–Corriu cross-coupling reaction of inactivated aryl chlorides with aryl Grignard reagents, **653**, 63
Kurtz powder
Chiral organometallic chromophores for nonlinear optics derived from $[Fe_2(\eta^5\text{-}C_5H_5)_2(CO)_2$(μ-CO)(μ-C–$CH_3$)]$^+$ $[BF_4]^-$, **655**, 70

Lactone
Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, **643-644**, 12
Lactones
Organo-rare-earth-metal initiated living polymerizations of polar and nonpolar monomers, **647**, 128
Synthesis and characterization of $(C_5H_9C_9H_6)_2Yb(THF)_2$(II) (**1**) and $[(C_5H_9C_5H_4)_2Yb(THF)]_2O_2$ (**2**), and ring-opening polymerization of lactones with **1**, **650**, 84
Lanthanide
Bis(pentafluorophenyl)mercury—a versatile synthon in organo-, organooxo-, and organoamido-lanthanoid chemistry, **647**, 50
Defining effective chiral binding sites at lanthanides—highly enantioselective reagents and catalysts from binaphtholate and pybox ligands, **647**, 151
DFT studies of some structures and reactions of lanthanides complexes, **647**, 190
Intramolecular coordination of Ln–O and Ln–N bonds in some new substituted lanthanocene complexes, **647**, 100
Non-hindered ansasamarocenes, versatile catalysts for diene/olefin/polar monomer copolymerisations. What is really the active species?, **647**, 167
Recent advances in f element reduction chemistry, **652**, 61
Synthesis and structure of monomeric and solvent-free $LPrX_2$ compounds supported by a new β-diketiminato ligand [L = $Et_2NCH_2CH_2NC(Me)CHC(Me)NCH_2CH_2NEt_2$, X = Cl, Br, BH_4], **643-644**, 47

Synthesis, structural characterization and catalytic behavior of one-atom bridged fluorenyl cyclopentadienyl lanthanocene complexes with C_s- or C_1-symmetry, **647**, 114
The expansion of divalent organolanthanide reduction chemistry via new molecular divalent complexes and sterically induced reduction reactivity of trivalent complexes, **647**, 2
The reaction of samarium(II) with manganese carbonyl: unexpected conversion of CO to formate. X-ray crystal structures of $[Sm(Tp^{Me2})_2]Mn(CO)_5$ and $\{[Sm(Tp^{Me2})_2]_2(\mu\text{-}HCO_2)\}Mn(CO)_5$ (Tp^{Me2} = HB(3,5-dimethylpyrazolyl), **664**, 298
Lanthanide chlorides
Syntheses and crystal structures of bis(tetrahydrofurfurylindenyl) lanthanocene chlorides $(C_4H_7OCH_2C_9H_6)_2LnCl$ (Ln = Nd, Sm, Dy, Ho, Er, Yb), **658**, 153
Lanthanide complexes
Aspects of non-classical organolanthanide chemistry, **647**, 71
Lanthanide ions
Organolanthanide chemistry in the gas phase, **647**, 216
Lanthanides
A new half-sandwich Yb(II) complex with the tridentate cyclopentadienyl ligand $[C_5H_4CH_2CH(O)CH_2OBu^n]^{2-}$: synthesis, self-assembly of a tetranuclear cubane-like framework $\{[(\eta^5\text{-}C_5H_4)CH_2CH(\mu^3\text{:}\eta^1\text{-}O)CH_2OBu^n]Yb\}_4$ and oxidative alkylation by Me_2Hg to the Yb(III) derivative $[(\eta^5\text{-}C_5H_4)CH_2CH(\eta^1\text{-}O)CH_2OBu^n]YbMe(THF)$, **647**, 94
Cyclopentadienyl complexes of yttrium and the lanthanides with bis(phosphinimino)methanides, **647**, 123
Synthesis, characterization and application of organolanthanide complexes $(CH_2{=}CHCH_2CH_2C_5H_4)_2Ln{-}Cl{\cdot}2THF$ (Ln = Sm, Y, Dy, Er) as methyl methacrylate (MMA) polymerization catalysts, **647**, 105
$[(Tp^{t\text{-}Bu,Me})Yb(\mu\text{-}H)]_2$: a fecund precursor to a host of divalent, hydrotris(pyrazolyl)borate supported f-element complexes, **647**, 84
Lanthanocene
Synthesis and characterization of $(C_5H_9C_9H_6)_2Yb(THF)_2$(II) (**1**) and $[(C_5H_9C_5H_4)_2Yb(THF)]_2O_2$ (**2**), and ring-opening polymerization of lactones with **1**, **650**, 84
Synthesis, structural characterization and catalytic behavior of one-atom bridged fluorenyl cyclopentadienyl lanthanocene complexes with C_s- or C_1-symmetry, **647**, 114
Lanthanum
β-SiH agostic bonding in sterically crowded lanthanidocene silylamide complexes, **647**, 236
Lead
A new, tetragonal, helical phase of plumbocene, Cp_2Pb; variations on a molecular string (Cp = C_5H_5), **650**, 75
Some recent advances in the chemistry of silicon and its homologues in low coordination states, **646**, 39
Lewis acid
Synthesis and structure of a highly fluorinated 7-bora-7*H*-benzo[*de*]anthracene, **643-644**, 164
The rearrangement of 3-vinylcyclobutene derivatives promoted by metallic Lewis acids, **656**, 299
Lewis acid–base adducts
Applications of boron–nitrogen and boron–phosphorus adducts in organometallic chemistry, **652**, 11
Lewis acid–base complexes
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, **643-644**, 53
Lewis base adducts
Synthesis and characterization of the inclusion compound of a methyltrioxorhenium(VII) adduct of 4-ferrocenylpyridine with β-cyclodextrin, **656**, 281
Lewis bases
Donor–acceptor interactions with electrophilic terminal phosphinidene complexes, **643-644**, 223
Lewis basicity of the phosphines
Phosphine–boranes incorporating the carborane cluster, **657**, 224
Ligand
A dimeric gold(I) triphospholyl complex, **643-644**, 357
Ligand modeling
DFT studies of some structures and reactions of lanthanides complexes, **647**, 190
Ligands
Cross-coupling reactions via organoboranes, **653**, 83
Electronic coupling in covalently-linked M–M quadruple bonds: $M_2\delta$ to ligand π conjugation, **641**, 15
Reactions of the tetramethylfulvene ligand coordinated to rhenium with hydrohalic acids and halogens: synthesis of dicarbonyl complexes with a 'four-legged piano-stool' structure containing mixed-halide ligands, **662**, 130
Ligand substitution
Substitution reactions of $[\{Co(\eta^5\text{-}C_5H_5)\}_2\{Fe(CO)_2(PPh_3)\}(\mu_3\text{-}S)(\mu_3\text{-}CS)]$, **651**, 60
Linear
A theoretical study of linear germacyanogen isomers, **659**, 121
Linear and branched polyethylene
New bis(imino)pyridine-iron(II)- and cobalt(II)-based catalysts: synthesis, characterization and activity towards polymerization of ethylene, **648**, 55
Linear dimers
Retrocyclization reactions of *gem*-dibromo(ferrocenyl)cyclopropanes, **645**, 183
Linear ether bond cleavage
Selective cleavage of the linear ether bond in benzyl glycidyl ether and triphenylmethyl glycidyl ether by potassium alkalide as two-electron-transfer reagent, **660**, 6
Linked
A new class of linked-bis(*N*,*N*′-dialkylamidinate) ligand: applications in the synthesis of bimetallic aluminium complexes, **662**, 178
Liquid crystal
Doubly cyclopalladated pyridazines: chiral liquid crystals, **645**, 246
Liquid crystals
Synthesis and mesomorphic properties of new imines and copper(II) complexes, **655**, 105
Liquid–liquid extraction
Functionalized cobalt bis(dicarbollide) ions as selective extraction reagents for removal of M^{2+} and M^{3+} cations from nuclear waste, crystal and molecular structures of the $[8,8'\text{-}\mu\text{-}ClP(O)(O)_2{<}(1,2\text{-}C_2B_9H_{10})_2\text{-}3,3'\text{-}Co]HN(C_2H_5)_3$ and $[8,8'\text{-}\mu\text{-}Et_2NP(O)(O)_2{<}(1,2\text{-}C_2B_9H_{10})_2\text{-}3,3'\text{-}Co](HN(CH_3)_3)$, **657**, 59
Synthesis of $[B_{12}H_{12}]^{2-}$ based extractants and their application for the treatment of nuclear wastes, **657**, 83
Lithiation
Chiral arene ruthenium complexes: Part 3. [Ruthenium(η^6-arene)(η^4-1,5-cyclooctadiene)] complexes with N or O donor functions in the arene side chain, **641**, 90
Lithiation of ferrocenylamines and vanadium dinitrogen chemistry, **664**, 245
Lithiophenylalkyllithiums: new dilithium reagents having both sp^2- and sp^3-hybridised remote carbanionic centres, **663**, 21
Lithium
The stable silylene $Si[(NCH_2^tBu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[Li\{Si(SiMe_3)_3\}(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], **651**, 150
The stable silylene $Si[(NCH_2^tBu)_2C_6H_4\text{-}1,2]$: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or $[LiSi(SiMe_3)_3(THF)_3]$ [R = Me, ^{t}Bu or $CH(SiMe_3)_2$], **643-644**, 272
Lithium alkyl
Unusual structures of lithium terphenyl derivatives, **643-644**, 461
Lithium aluminumhydride
Reaction pathways towards 1,1,2,2-tetra^{t}butyldistannanes, **646**, 271

Lithium aryl
Unusual structures of lithium terphenyl derivatives, **643-644**, 461
Lithium benzazaphospholides
Metalated 1,3-azaphospholes: synthesis of lithium-1,3-benzazaphospholides and reactivity towards organoelement and organometal halides, **646**, 113
Lithium compounds
Lithiophenylalkyllithiums: new dilithium reagents having both sp^2- and sp^3-hybridised remote carbanionic centres, **663**, 21
Lithium dust
Polylithiumorganic compounds: Part 28. The reaction of allene and alkyl substituted allenes with lithium metal, **642**, 1
Lithium enolates
Direct synthesis of unsaturated β-amino acids, **662**, 172
Lithium-(fluorosilyl)amide
Tetrakis[lithium-*tert*-butyl(di-*tert*-butylfluorosilyl)amide]-dilithium oxide, $(^tBu_2SiF-NLi^tBu)_4Li_2O$—a Li_6O^{4+}-cluster, **646**, 134
Lithium triphospha-cyclopentenyl
The first 2,3-dihydro-1*H*-[1,2,4] triphosphole, **650**, 198
Long-chain 3,5-disubstituted pyrazoles
Chemistry of Rh(I) complexes based on mesogenic 3,5-disubstituted pyrazole ligands. X-ray crystal structures of 3,5-di(4-*n*-butoxyphenyl)pyrazole (Hpz^{bp2}) and $[Rh(\mu\text{-}pz^{R2})(CO)_2]_2$ ($R = C_6H_4OC_nH_{2n+1}$, $n = 10$, 12) compounds. Part II, **654**, 150
Low-coordinate phosphorus
Metalated 1,3-azaphospholes: synthesis of lithium-1,3-benzazaphospholides and reactivity towards organoelement and organometal halides, **646**, 113
Low valent Group 13 elements
Synthesis and structural characterisation of the 3,5-di-*tert*-butyl-1,2,4-triphospholyl complexes of monovalent gallium and thallium, $[M(\eta^5 - P_3C_2Bu^t_2)]$, M = Ga, Tl, **646**, 191
Luminescence
Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, **643-644**, 89
Luminescent properties
A luminescent Pt_3Pb cluster with three Pt(II) → Pb(II) bonds, **663**, 284
Synthesis and luminescence properties of novel ferrocene–naphthalimides dyads, **645**, 168
Lutetium
Organolanthanides RLnX (R is alkyl, aryl, X is halogen) and lanthanide complexes with aromatic hydrocarbon dianions: synthesis, structure, and reactivity, **647**, 21
Synthesis and crystal structure of one carbon-atom bridged lutetium complex $[Ph_2C(Flu)(Cp)]LuN(TMS)_2$ and catalytic activity for polymerization of polar monomers, **645**, 82

Macrocycle
New N- and O-donor ligand environments in organoscandium chemistry, **647**, 145
Macrocyclic compounds
Applications of boron–nitrogen and boron–phosphorus adducts in organometallic chemistry, **652**, 11
Macrolactams
The intramolecular Stille reaction in some target natural product syntheses, **653**, 261
Macrolactones
The intramolecular Stille reaction in some target natural product syntheses, **653**, 261
Macropolyhedra
Macropolyhedral thiaboranes with unusual *arachno* subclusters—a computational investigation, **657**, 273
Macropolyhedral
Macropolyhedral boron-containing cluster chemistry: A novel triple-cluster structural motif. Isolation and characterisation of contiguous twenty-vertex $[(PPh_3)_4ClPd_4B_{16}H_{17}(PPh_3)_2]$, **657**, 262
Macropolyhedral boron-containing cluster chemistry: Models for intermediates en route to globular and discoidal megaloborane assemblies. Structures of $[nido\text{-}B_{10}H_{12}(nido\text{-}B_5H_8)_2]$ and $[(CH_2CH_2C_5H_4N)\text{-}arachno\text{-}B_{10}H_{10}(NC_5H_4\text{-}closo\text{-}C_2B_{10}H_{10})]$ as determined by synchrotron X-ray diffraction analysis, **657**, 256
Magnesium
A role for free phosphinidenes in the reaction of magnesium and sterically encumbered $ArPCl_2$ in solution at room temperature, **646**, 255
Preparation of 2-arylated-1,4-phenylenediamines by palladium-catalyzed cross-coupling reactions, **653**, 122
The B–I activation in *o*-carborane clusters: their fate towards B–H. Easy synthesis of $[7,10\text{-}C_2B_{10}H_{13}]^-$, **642**, 16
Magnetic properties
Aromaticity of annulated benzene, pyridine and phosphabenzene, **643-644**, 39
MALDI-TOF-MS
Mass spectrometry of polystyrene and polypropene ruthenium complexes. A new tool for polymer characterization, **663**, 213
Malonate
Synthesis and characterization of monomeric Ba and Sr complexes with malonate and Lewis base ligands, **648**, 214
Mandelic acid
Planar chiral (η^6-arene)tricarbonylchromium complexes derived from mandelic acid, **654**, 140
Manganese
Combining organometallic and Werner-type coordination sites in highly preorganized heterobimetallic systems, **641**, 113
Coupling reactions of manganese(I) cyclometallated compounds derived from heterocyclic N-donor ligands with alkynes, **656**, 270
Reactions of cyclomanganated complexes with carbon disulfide: routes to η^2-aryldithiocarboxylate-$Mn(CO)_4$ complexes and to the trithiocarbonate complex $(\mu_3\text{-}CS_3)_2Mn_4(CO)_{16}$, **664**, 288
Reactions of dirhenium heptoxide with manganese(I) and rhenium(I) hydrido, alkoxo, methylcarbonato, carbonato-bridged, and methoxymethyl complexes. The X-ray structures of *fac*-$(CO)_3(dppp)MnOReO_3$ and *fac*-$(CO)_3(dppp)ReOReO_3$, **658**, 88
Synthesis and reactivity of transition metal complexes containing halogenated boryl ligands, **649**, 9
The reaction of samarium(II) with manganese carbonyl: unexpected conversion of CO to formate. X-ray crystal structures of $[Sm(Tp^{Me2})_2]Mn(CO)_5$ and $\{[Sm(Tp^{Me2})_2]_2(\mu\text{-}HCO_2)\}Mn(CO)_5$ (Tp^{Me2} = HB(3,5-dimethylpyrazolyl), **664**, 298
Vibrational spectroscopic and force field studies of (η^5-Cp)ML_3-type complexes (M = Mn, Re; L = CO, O), **642**, 246
Manganese carbonyl
The catalytic synthesis of thiacrowns from thiiranes by Group VI and VII transition metal carbonyl complexes, **652**, 51
Manganese complexes
Reaction of silylpentacarbonylmanganese with hydride-transfer reagents: reduction of carbonyl ligands accompanied with Si–C C and C–C coupling, **650**, 91
Mass spectrometry
Bimetallic nickel complexes with bridging dithiolato Schiff base ligands: synthesis, mass spectral characterisation and electrochemistry, **656**, 262
Detection of aryllead(IV) carboxylates and their solvent adducts by ESI-mass spectrometry, **645**, 176
Kinetics of the gas phase reactions of the ion $C_5H_5Fe^+$ with substituted pyridines, **650**, 69

Matrix isolation
Reactions of methyl(phenyl)silylene with CO and PH_3—the formation of acid–base complexes, **641**, 156
MCF7
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, **643-644**, 350
Me_5C_5Ga
A novel synthetic route to pentaalkylcyclopentadienylgallium(I) compounds, **654**, 176
Mediator
Electrocatalytic reduction of aldehydes and ketones on nickel(II) tetraazamacrocyclic complex-modified graphite felt electrode, **662**, 9
Me_4EtC_5Ga
A novel synthetic route to pentaalkylcyclopentadienylgallium(I) compounds, **654**, 176
Megaloborane
Macropolyhedral boron-containing cluster chemistry: Models for intermediates en route to globular and discoidal megaloborane assemblies. Structures of [*nido*-$B_{10}H_{12}$(*nido*-$B_5H_8)_2$] and [($CH_2CH_2C_5H_4N$)-*arachno*-$B_{10}H_{10}$(NC_5H_4-*closo*-$C_2B_{10}H_{10}$)] as determined by synchrotron X-ray diffraction analysis, **657**, 256
3-Membered ring opening
3,3-Diferrocenylcyclopropene, **659**, 56
Menthol
Synthesis and X-ray structures of (biphenoxide)Ti species: four and five coordinate complexes that crystallize as mixtures of diastereomers, **663**, 70
Mercaptopyridine
Preparations of sulfido-tricobalt clusters containing pyridyl type ligands: insertion of carbon monoxide into cobalt–carbon bond, **655**, 172
2-Mercaptopyridine
Dimeric cyclopalladated azobenzenes: structural differences between 2-hydroxypyridine and 2-mercaptopyridine bridged complexes, **650**, 202
Mercaptopyrimidine
The reactions of 4,6-dimethyl-2-mercaptopyrimidine with dimetallic compounds: diiron nonacarbonyl and cyclopentadienylmolybedenum tricarbonyl dimer, **655**, 49
Mercuration
Polysubstituted derivatives of 3-(η^5-Cp)-4-SMe_2-3,1,2-$FeC_2B_9H_{10}$. X-ray structure of 3-(η^5-Cp)-4-SMe_2-7,8-$(CF_3COO)_2$-12-HgCl-3,1,2-$FeC_2B_9H_7$, **657**, 171
Mercury
Recent studies on alkynyl complexes of the Group 11 and 12 metals, **641**, 126
Mesogenic
Doubly cyclopalladated pyridazines: chiral liquid crystals, **645**, 246
Mesomorphic behaviour
Chemistry of Rh(I) complexes based on mesogenic 3,5-disubstituted pyrazole ligands. X-ray crystal structures of 3,5-di(4-*n*-butoxyphenyl)pyrazole (Hpz^{bp2}) and [$Rh(\mu\text{-}pz^{R2})(CO)_2]_2$ ($R = C_6H_4OC_nH_{2n+1}$, $n = 10, 12$) compounds. Part II, **654**, 150
Mesylate
Scope and limitation of the nickel-catalyzed coupling reaction between lithium borates and mesylates, **653**, 91
Metal acetylides
A new frontier in the metal-catalyzed cross-coupling reaction field. The palladium-promoted metal–carbon bond formation. Scope and mechanism of a new tool in organometallic synthesis, **653**, 177
Metal-assisted hydrophosphination
Hydrophosphination with cationic primary phosphine iron complexes: synthesis of P-chiral functionalized phosphines, **661**, 95
Metal atom vibrational amplitudes
Metal atom motion, vibrational anisotropy and hydrogen bonding effects in octamethylferrocenylmethanol, **642**, 203
Metal binding properties
Density functional studies on N-fused porphyrin. Electronic, magnetic and metal binding properties, **643-644**, 265
Metal–carbon bond
The metal–carbon bond in vinylidene, carbonyl, isocyanide and ethylene complexes, **661**, 181
Metal carbonyl
Synthesis, spectroscopy, and structural characterization of carbonyl and cage phosphite adducts of edge-bridged open metallocenes, **655**, 158
Metal carbonyl complexes
Hemilability of the primary amine–metal bond in polyamine-(Group 6) metal carbonyl complexes, **664**, 214
Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)tetrathiafulvalenes, **643-644**, 292
Metal carbonyls
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, **643-644**, 181
Metal catalysis
Transition metal hydrides as active intermediates in hydrogen transfer reactions, **652**, 105
Metal chlorides
Synthesis and UV spectra of 8-mercaptoquinoline organosilicon derivatives and their metal halides complexes, **642**, 91
Metal complexes
Catalytic oxidations by peroxy, peroxo and oxo metal complexes: an interdisciplinary account with a personal view, **661**, 3
Metal complex fragments
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = 1,2-$(Ph_2P)_2C_2H_4$), **643-644**, 468
Metal enolate
One-electron oxidation of metal enolates and metal phenolates, **661**, 169
Metal hydride
A neutron diffraction study of $Cp_2Ti\{(\mu\text{-}H)_2BC_8H_{14}\}$, **654**, 216
Metal hydrides
Transition metal hydrides as active intermediates in hydrogen transfer reactions, **652**, 105
Metallaborane
Macropolyhedral boron-containing cluster chemistry: A novel triple-cluster structural motif. Isolation and characterisation of contiguous twenty-vertex [$(PPh_3)_4ClPd_4B_{16}H_{17}(PPh_3)_2$], **657**, 262
Metallaboranes
Chemistry on a metallathiaborane cluster Part 4: reactions of 11-vertex rhodathiaboranes with bidentate phosphines and their subsequent rearrangements, **657**, 40
Functionalized cobalt bis(dicarbollide) ions as selective extraction reagents for removal of M^{2+} and M^{3+} cations from nuclear waste, crystal and molecular structures of the [8,8′-μ-$ClP(O)(O)_2$<(1,2-$C_2B_9H_{10})_2$-3,3′-Co]$HN(C_2H_5)_3$ and [8,8′-μ-$Et_2NP(O)(O)_2$<(1,2-$C_2B_9H_{10})_2$-3,3′-Co]$(HN(CH_3)_3)$, **657**, 59
Heteroboranes of the p-block elements, **646**, 21
Metallacarboranes
Imide- and amide-supported Group 5 and 6 metallacarboranes, **657**, 9
Syntheses of the $B_{(8)}$-hydroxy- and $B_{(8,8')}$-dihydroxy-derivatives of the bis(1,2-dicarbollido)-3-cobalt(1-)ate ion by its reductive acetoxylation and hydroxylation: molecular structure of [8,8′-μ-

$CH_3C(O)_2<(1,2\text{-}C_2B_9H_{10})_2\text{-}3\text{-}Co]^0$ zwitterion determined by X-ray diffraction analysis, **649**, 181
Synthesis and structure of rhodium complexes with monoanionic carborane ligand $[9\text{-}SMe_2\text{-}7,8\text{-}C_2B_9H_{10}]^-$, **657**, 115
Metallacycle
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, **643-644**, 331
Metallacycles
Intramolecular C–N bond formation in the reductive elimination of *ortho*-palladated arylhydrazones of acetophenone, **658**, 15
Synthesis of novel metallacyclic zirconocene complexes from ω-alkenyl-functionalized zirconocene dichloride complexes and their use in the α-olefin polymerization, **648**, 134
Metallamacrocycle
Design, synthesis and solid state structural characterisation of a metallacyclophane formed by a diazadioxamacrocycle bearing two pyridines and silver(I) cation, **643-644**, 376
Metallaphosphorane
Syntheses, structure, and Berry pseudorotation of ruthenium-, iron-, and cobalt-phosphorane complexes, **646**, 204
Metallate(II) anions
Synthesis and structures of crystalline bis(trimethylsilyl)methanido complexes of potassium, calcium and ytterbium, **663**, 263
Metallocene
A new, tetragonal, helical phase of plumbocene, Cp_2Pb; variations on a molecular string ($Cp = C_5H_5$), **650**, 75
Bis(2-*N*,*N*′-methylpiperazinoindenyl)zirconium dichloride. Crystal structure of bis(2-*N*,*N*′-methylpiperazinoindenyl)$ZrCl_2$, **659**, 64
Effects of counterions on intramolecular electron transfer in 1′,1‴-dinaphthylmethylbiferrocenium cation: structural, Mössbauer and EPR characteristics, **659**, 125
Novel 2-indenyl *ansa*-zirconocenes for the polymerization of α-olefins, **654**, 29
Observation of non-chelated bis(pentamethylcyclopentadienyl)zirconium-alkyl–alkene complexes is thwarted by competitive arene or amine coordination or by β-hydride elimination, **642**, 120
Synthesis, molecular structure, and polymerization reactivity of ethylenebis(1,3-dimethylcyclopentadienyl)zirconium dichloride, **660**, 161
Synthesis, structures and polymerization catalytic properties of germyl-bridged bis(cyclopentadienyl) metallocenes, **645**, 262
Metallocene catalysts
Polymer immobilized silane bridged metallocene catalysts for ethylene polymerization, **655**, 167
Metallocene cation formation
Synthesis and structural characterization of $[H(OEt_2)_2]^+[(C_3H_3N_2)\{B(C_6F_5)_3\}_2]^-$ — a Brønsted acid with an imidazole-derived 'non-coordinating' anion, **641**, 148
Metallocene complex
Lanthanide(II) complexes bearing mixed linked and unlinked cyclopentadienyl–monodentate-anionic ligands, **647**, 61
Metallocene hydrides
Gas-phase electronic absorption spectra of metallocene dihydrides $M(\eta^5\text{-}C_5H_5)_2H_2$ (M = Mo, W), **664**, 106
Metallocenes
Organolanthanide chemistry in the gas phase, **647**, 216
β-SiH agostic bonding in sterically crowded lanthanidocene silylamide complexes, **647**, 236
Synthesis of dimetallic μ-alkylideneamido zirconocene dications by a thermodynamically favorable lithium chloride elimination pathway, **643-644**, 61
Zirconium bis-indenyl compounds. The influence of substituents on the ethene polymerization behavior of 1- and 2-substituted (R-Ind)$_2ZrCl_2$/MAO catalysts, **642**, 195
Metallododeca nitroporphyrins
One-pot dodecanitration of Zn(II) and Ni(II) *meso*-tetrakis-(2,6-dichlorophenyl) porphyrin, and extreme redox properties of the obtained complexes, **643-644**, 522
Metallo-ligands
Stable mononuclear and binuclear ruthenium(II) arene complexes with multiple N-donor poly-pyridyl ligands: synthesis, spectroscopic and structural characterization. Single crystal X-ray structure of $[(\eta^6\text{-}C_{10}H_{14})RuCl(bppz)]BF_4$, **642**, 48
Synthetic, spectral and structural aspects of some mono- and binuclear (homo/hetero) Ru(II) hydrido carbonyl complexes, **648**, 39
Metallomesogen
Angular (*cis*-stilbazole) geometry in octahedral dimethyldihalidoplatinum(IV) complexes: potential as metallomesogens and X-ray structure of $[PtMe_2I_2(NC_5H_4CH{=}CHC_6H_4OC_7H_{15})_2]$, **645**, 206
Metallomesogens
Synthesis and mesomorphic properties of new imines and copper(II) complexes, **655**, 105
Metallonium cations
Generation of $[1,2\text{-}(CH_2)_2C_5Me_3MC_5Me_4CH_2\text{-}1']^{3+}$ (M = Ru, Os) trications and determination of their structures by comparing NMR-spectra with density-functional method calculations, **645**, 87
Metallophilic interactions
Directing role of anions in the syntheses of the silver–alkynyl cages $[Ag_{14}(C{\equiv}C^tBu)_{12}X][BF_4]$ (X = F, Cl, Br) and silver–alkynyl polymers $[Ag_3(C{\equiv}C^tBu)_2(X)]_n$ (X = Tos, NO_3), **652**, 87
Metallophosphines
Metalated 1,3-azaphospholes: synthesis of lithium-1,3-benzazaphospholides and reactivity towards organoelement and organometal halides, **646**, 113
Metal-metal bonds
Transition metal complexes with polydentate amido ligands: novel structural building blocks and chemical reagents, **661**, 85
Metal–metal bonds
Dimers of highly π-loaded organoimido d^1 metal radicals of niobium, tantalum, molybdenum, tungsten, and rhenium: the context of the cyclopentadienyl imido ligand analogy, **655**, 96
Organolanthanide chemistry in the gas phase, **647**, 216
Metal–metal bonds
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, **643-644**, 181
Metal migration
A facile and diastereoselective access to substituted cyclopentanones from Fischer alkenyl carbene complexes and 1-amino-1-azadienes, **643-644**, 363
Metal phenolate
One-electron oxidation of metal enolates and metal phenolates, **661**, 169
Metal-promoted reaction
The reactions of 4,6-dimethyl-2-mercaptopyrimidine with dimetallic compounds: diiron nonacarbonyl and cyclopentadienylmolybedenum tricarbonyl dimer, **655**, 49
Metasilicates
Silanones and metasilicates from negatively charged $\equiv SiO^{(-)}$ and $=SiO_2^{(2-)}$ precursors. Theoretical study, **642**, 163
meta-Terphenyl
A role for free phosphinidenes in the reaction of magnesium and sterically encumbered $ArPCl_2$ in solution at room temperature, **646**, 255
Metathesis
Cp^*GaCl_2 and Cp^*_2GaCl ($Cp^* = \eta^1\text{-}C_5Me_5$) as starting materials for novel Group 13 element complexes, **646**, 247

The $Cl_2(PCy_3)(IMes)Ru(=CHPh)$ catalyst: olefin metathesis versus olefin isomerization, **643-644**, 247
Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, **643-644**, 231
Metathesis polymerisation
Synthesis of conjugated polymers with ferrocene units as pendants or as end-groups, **645**, 27
σ-Metathesis reaction
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = $1,2\text{-}(Ph_2P)_2C_2H_4$), **643-644**, 468
Metathesis reactions
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, **643-644**, 324
Methylaluminoxane
New bis(imino)pyridine-iron(II)- and cobalt(II)-based catalysts: synthesis, characterization and activity towards polymerization of ethylene, **648**, 55
Synthesis, molecular structure, and polymerization reactivity of ethylenebis(1,3-dimethylcyclopentadienyl)zirconium dichloride, **660**, 161
Zirconocene compounds derived from boratastilbene, 4-boratastyrylstilbene, and 1,4-bis(boratastyryl)benzene and their reactivities to the ethylene polymerization, **642**, 275
Methylation
Characterization of a metallocene/co-catalyst system supported on silica by Fourier-Transform Raman spectroscopy, **651**, 80
Synthetic, structural and theoretical studies on the new 2,3-dihydro-1,2,4-thia-, selena- and tellura-diphospholes, $P_2EC_2\text{-}Bu^t_2(H)Me$, (E = S, Se, Te) and their $[M(CO)_5]$ complexes (M = Cr, Mo, W), **659**, 84
Methyl complexes
Synthesis, characterisation and catalytic activity of Pd(II) and Ni(II) complexes with new cyclic α-diphenylphosphino-ketoimines. Crystal structure of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclopentylidene)aniline and of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclohexylidene)aniline, **662**, 150
Methylenecyclopropane
Bis(η^5-cyclopentadienyl)- and bis(η^5-indenyl)metallacycles of titanium and zirconium from methylenecyclopropanes by oxidative coupling, **656**, 288
μ-Methylene ligand
Proton induced coupling reactions in dinuclear σ-alkynyl-μ-methylene-rhodium complexes, **663**, 145
Methylmercury
Organomercury derivatives of the 2,4,6-trimercaptotriazine (H_3TMT). X-ray crystal structure of $(HgMe)_3(TMT)$, **645**, 101
2-Methyl-8-quinolinol
Synthesis and reactivity of $Al(Et)q'_2$ (q′ = 2-methyl-8-quinolinolato) and crystal structures of $[Al(Et)_2q]_2$ and Alq'_2q (q = 8-quinolinolato), **654**, 229
Methylquinoxaline
5-Methylquinoxaline as a versatile mono-, bi- and tridentate ligand in Palladium(II) chemistry. Crystal structures of *trans*-$[Pd(OAc)_2(N1\text{-}C_8H_5N_2Me\text{-}5)_2]$ and $[Pd(OAc)(C,N4\text{-}CH_2C_8H_5N_2\text{-}5)(PPh_3)]$, **648**, 62
Methyl substituents
Rydberg spectra of bis(η^6-benzene)chromium derivatives: Gas-phase photoabsorption study of bis(η^6-1,2,4-trimethylbenzene)chromium and bis(η^6-1,2,4,5-tetramethylbenzene)chromium, **649**, 100
Methyltrioxorhenium
Synthesis and characterization of the inclusion compound of a methyltrioxorhenium(VII) adduct of 4-ferrocenylpyridine with β-cyclodextrin, **656**, 281
2-Methyltroponeiron tricarbonyl
The synthesis of a hydroazulen-2-one skeleton-determination of the diastereoselectivity of [3+2] cycloaddition of tricarbonyl[(4,5,6,7-η)-2-methyltropone]iron with *E*/*Z*-η^1-(crotyl)Fp, **659**, 43
M–H–B bridge bond
A neutron diffraction study of $Cp_2Ti\{(\mu\text{-}H)_2BC_8H_{14}\}$, **654**, 216
Michael addition
Chlorotrimethylsilane-mediated Michael addition reactions of chiral benzylic anions derived from η^6-chromiumtricarbonyl complexes, **658**, 21
Michael addition of Grignard reagents to tetraethyl ethenylidenebisphosphonate, **650**, 77
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, **643-644**, 381
Michaelis–Arbuzov rearrangements
Synthesis of 1,2-bis[(diorgano)phosphino]ethanes via Michaelis–Arbuzov type rearrangements, **646**, 230
Microstructure
Synthesis of polysilanes bearing pendant carbosilyl groups and ^{29}Si-NMR probe on the tacticity using side chain silicon atoms, **650**, 223
Migratory insertion
Iridium-containing cumulenes: how to prepare and how to use, **661**, 137
Mills–Nixon effect
Aromaticity of annulated benzene, pyridine and phosphabenzene, **643-644**, 39
Mixed-halide
Reactions of the tetramethylfulvene ligand coordinated to rhenium with hydrohalic acids and halogens: synthesis of dicarbonyl complexes with a 'four-legged piano-stool' structure containing mixed-halide ligands, **662**, 130
Mixed ligand complexes
Oxorhenium(V) '3+2' mixed-ligand complexes carrying the SNO/SN donor and C_{60}, **664**, 208
Mixed ligands
Lanthanide(II) complexes bearing mixed linked and unlinked cyclopentadienyl–monodentate-anionic ligands, **647**, 61
Mixed-metal
Reactivity studies of monoacetylide species towards chalcogen-bridged mixed-metal clusters: Synthesis and characterisation of $[(\eta^5\text{-}C_5H_5)_2Fe_2RuM_2(CO)_6(\mu_3\text{-}E)_2\{\mu_4\text{-}CC(Ph)C(Ph)C\}]$ (M = Mo, W; E = S, Se) and $[(\eta^5\text{-}C_5H_5)_2Fe_2Ru_2M_2(CO)_9(\mu_3\text{-}E)_2\{\mu\text{-}CCPh\}_2]$ (M = W, E = S, Se), **659**, 196
Synthesis, characterization of new Rh–Co mixed-metal clusters and reactions of clusters containing $[Rh_2Co_2C_2]$ core with 1-alkynes and/or carbon monoxide, **650**, 181
Mixed-valence 1′,1‴-dinaphthylmethylbiferrocenium
Effects of counterions on intramolecular electron transfer in 1′,1‴-dinaphthylmethylbiferrocenium cation: structural, Mössbauer and EPR characteristics, **659**, 125
Mixed-valent compounds
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, **643-644**, 68
MMA
Synthesis, characterization and application of organolanthanide complexes $(CH_2{=}CHCH_2CH_2C_5H_4)_2Ln\text{–}Cl\cdot 2THF$ (Ln = Sm, Y, Dy, Er) as methyl methacrylate (MMA) polymerization catalysts, **647**, 105
MO calculations
Azanonaborane-pyridine derivatives $[(R'C_5H_4N)B_8H_{11}NHR'']$: synthesis, structure and some molecular-orbital calculations, **657**, 205

Mo complex
Reactions of tetraphosphine complex [Mo{*meso*-*o*-C_6H_4($PPhCH_2$-CH_2PPh_2)$_2$}($Ph_2PCH_2CH_2PPh_2$)] with nitrile, CO, and isocyanide, **658**, 106
Modified electrode
Electrocatalytic reduction of aldehydes and ketones on nickel(II) tetraazamacrocyclic complex-modified graphite felt electrode, **662**, 9
Molecular design
Molecular construction based on icosahedral carboranes and aromatic *N*,*N*′-dimethylurea groups. Aromatic layered molecules and a transition metal complex, **657**, 48
Molecular orbital calculations
Synthesis, characterization and theoretical studies of new heterometallic carbonyl clusters bridged by 4,4′-dipyridyl unit, **655**, 39
Molecular structures
Molecular structures of trimeric diphenyltin chalcogenides, $(Ph_2SnE)_3$, E = S, Se, Te, **660**, 43
Synthesis, characterization and X-ray structures of bis(arytelluro)ethynes, **654**, 91
Molecular structures of
Difluorenylsilane derivatives, a class of compounds exhibiting strong intra- and intermolecular C–H···π interactions. Crystal and molecular structures of bis(9-methylfluoren-9-yl)dimethylsilane and (9-methylfluoren-9-yl)(fluoren-9-yl) dimethylsilane, **659**, 95
Molecules
DFT studies of some structures and reactions of lanthanides complexes, **647**, 190
Molybdacarborane
Synthesis and characterisation of the *exo*-*nido* molybdacarborane complex Mo(η-C_3H_5)$(CO)_2$(7,8-μ-SCH_2CH_2S-7,8-*nido*-$C_2B_9H_{10}$). Strong B–H–Mo 3-centre bonding, **663**, 221
Molybdenocene
The effect of trimethylsilyl substituents on the ring-slippage of bis-indenyl-molybdenocene derivatives, **648**, 270
Molybdenum
Alkyne oligomerization catalyzed by molybdenum(0) complexes, **649**, 173
Allyl complexes of molybdenum with Schiff base ligands. The crystal structures of [$MoCl(CO)_2${$N(C_6H_4$-2-OMe)=C(Me)C_5H_4N}(η^3-C_3H_5)] and [$MoCl(CO)_2${N(Me)=C(Ph)C_5H_4N}(η^3-C_3H_5)] are described, **660**, 91
Dimers of highly π-loaded organoimido d^1 metal radicals of niobium, tantalum, molybdenum, tungsten, and rhenium: the context of the cyclopentadienyl imido ligand analogy, **655**, 96
Facile syntheses of new multidentate (phosphino)amines: X-ray structure of 1,4-{$(OC)_4Mo(Ph_2P)_2NCH_2$}$_2C_6H_4$, **664**, 294
Gas-phase electronic absorption spectra of metallocene dihydrides M(η^5-C_5H_5)$_2H_2$ (M = Mo, W), **664**, 106
Half-sandwich molybdenum(III) compounds containing diazadiene ligands and their use in the controlled radical polymerization of styrene, **663**, 269
Investigations on the trigonal twist process in the pseudooctahedral complexes [MX$(CO)_2$(P–P)(η^3-R)] (M = Mo or W; X = halide or pseudohalide; P–P = bidentate P-donor ligand; R = cycloheptatrienyl, cyclohexenyl or cyclooctenyl), **645**, 218
Metal–coumarin complexes: synthesis and characterization of 7-isocyanocoumarin ligands and $Mo(CO)_4$(7-isocyanocoumarin)$_2$ complexes. X-ray crystal structure of $Mo(CO)_4$(7-isocyano-4-trifluoromethylcoumarin)$_2$, **642**, 97
Mono-indenyl and cyclopentadienyl derivatives of molybdenum(IV) with a 16 valence-electron configuration, **663**, 78
New insights into the reaction of *t*-butylhydroperoxide with dichloro- and dimethyl(dioxo)molybdenum(VI), **649**, 108
Preparation of dinitrogen complexes $Mo(N_2)_2P_4$ stabilised by phosphonite $PPh(OEt)_2$ and phosphinite $PPh_2(OEt)$ ligands, **660**, 55
Rational synthesis of tricobalt-molybdenum and -tungsten butterfly clusters with alkyne ligands, **659**, 142
Reactions of cyclopentadienylmolybdenum compounds with bismuth alkoxides, **641**, 9
Regioselective hydrostannations catalyzed by molybdenum isonitrile complexes, **641**, 26
Synthesis and characterization of Group 6 transition-metal [70]fullerene derivatives containing dppb ligands. Crystal structure of *fac*-$Mo(CO)_3$(dppb)(CH_3CN), **662**, 51
Synthesis and molecular structure of the nitride (L_{OEt})Mo(N)Cl_2 [L_{OEt} = (η-C_5H_5)Co{$P(O)(OEt)_2$}$_3$], **662**, 59
Synthesis and reactivity of organochalogen ester substituted η^3-butadienyl complexes of Mo(II): crystal structure of [MoCl$(CO)_2$(η^3-$CH_2C(COSePh)C=CH_2$)(1,10-phenanthroline)]·0.5 CH_2Cl_2, **664**, 277
Synthesis of new half sandwich tetrachloro derivatives of molybdenum(V) and tungsten(V). X-ray structures of ($C_5HPr^i_4$)W$(CO)_3$-(CH_3) and (C_5Et_5)WCl_4, **654**, 109
Synthesis, reactivity and structures of diethyldithiophosphate molybdenum complexes: crystal structures of [Mo{η^2-$S_2P(OEt_2)$}$_2$($PhC{\equiv}CPh)_2$] and [Mo(η^3-C_3H_5){η^1-$S_2P(OEt_2)$}-(Phen)$(CO)_2$], **658**, 191
The effect of trimethylsilyl substituents on the ring-slippage of bis-indenyl-molybdenocene derivatives, **648**, 270
Theoretical analysis of bis(ethylene) complexes of molybdenum and tungsten, **663**, 83
The syntheses and structures of coordinatively unsaturated aryloxy-hydride complexes of molybdenum, $Mo(PMe_3)_4$(OAr)H: reversible C–H bond activation and comparison with their tungsten analogues, **652**, 37
Tripodal triphos {$MeC(CH_2PPh_2)_3$} complexes of molybdenum(II) and tungsten(II). Reactions of [$MI_2(CO)_3${$MeC(CH_2PPh_2)_3$–*P*,*P*′}] (M = Mo or W) with molybdenum(II) and tungsten(II) complexes, **648**, 99
Molybdenum carbonyl
The catalytic synthesis of thiacrowns from thiiranes by Group VI and VII transition metal carbonyl complexes, **652**, 51
Molybdenum(II)
Synthesis and reactions of the cationic seven-coordinate complexes, [$MoI(CO)_3(NCR)${$Ph_2P(CH_2)_n PPh_2$}][BF_4] (R = Me, *n* = 1, 2 and 3; R = Et, *n* = 1). Crystal structures of [$MoI_2(CO)_2(PPh_3)$-{$Ph_2P(CH_2)PPh_2$}], [$MoI(CO)_2${$Ph_2P(CH_2)PPh_2$}$_2$][BF_4]·CH_2Cl_2, [$MoCl_3O${$Ph_2PO(CH_2)OPPh_2$}] and [Mo_3(μ$_3$-I)$_2${μ$_2$-$Ph_2P(CH_2)PPh_2$}$_3$]I, **664**, 45
Molybdenum(II)allyl
The crystal structure of [Mo(NCS)$(CO)_2$(η^3-C_3H_5)$(NCMe)_2$]·MeCN and the reactions of {$Mo(CO)_2$(η^3-C_3H_5)$^+$} containing species with symmetric alkynes, **664**, 176
MoNiFeS clusters
Syntheses and structural characterization of transition metal tetrahedral clusters (η^5-RC_5H_4)$(CO)_8MoRu_2H$(μ$_3$-S) and [(η^5-RC_5H_4)$(CO)_4MoRu$(μ$_3$-S)]$_2$ generated by isolobal reactions, **656**, 228
Monoacetylide
Reactivity studies of monoacetylide species towards chalcogen-bridged mixed-metal clusters: Synthesis and characterisation of [(η^5-C_5H_5)$_2Fe_2RuM_2(CO)_6$(μ$_3$-E)$_2${μ$_4$-CC(Ph)C(Ph)C}] (M = Mo, W; E = S, Se) and [(η^5-C_5H_5)$_2Fe_2Ru_2M_2(CO)_9$(μ$_3$-E)$_2${μ-CCPh}$_2$] (M = W, E = S, Se), **659**, 196
Mono(bipyridine) complexes
Alkoxycarbonyl substituted ruthenium mono(bipyridine) complexes: steric effects of the bipyridine substituents, **654**, 8

Monocarbaboranes
Recent developments in the chemistry of the nine-vertex monocarbaboranes, **657**, 3
Monocations
Generation of $[1,2\text{-}(CH_2)_2C_5Me_3MC_5Me_4CH_2\text{-}1']^{3+}$ (M = Ru, Os) trications and determination of their structures by comparing NMR-spectra with density-functional method calculations, **645**, 87
Monodentate-anion ligand
Lanthanide(II) complexes bearing mixed linked and unlinked cyclopentadienyl–monodentate-anionic ligands, **647**, 61
Monomeric, dimeric and tetrameric forms
Organoaluminum chemistry with low valent aluminum — recent developments, **646**, 4
Mono-*O*-phenylation
A structural and mechanistic investigation of the mono-*O*-phenylation of diols with $BiPh_3(OAc)_2$, **662**, 98
$MoRu_2S$ clusters
Syntheses and structural characterization of transition metal tetrahedral clusters $(\eta^5\text{-}RC_5H_4)(CO)_8MoRu_2H(\mu_3\text{-}S)$ and $[(\eta^5\text{-}RC_5H_4)(CO)_4MoRu(\mu_3\text{-}S)]_2$ generated by isolobal reactions, **656**, 228
$Mo_2Ru_2S_2$ clusters
Syntheses and structural characterization of transition metal tetrahedral clusters $(\eta^5\text{-}RC_5H_4)(CO)_8MoRu_2H(\mu_3\text{-}S)$ and $[(\eta^5\text{-}RC_5H_4)(CO)_4MoRu(\mu_3\text{-}S)]_2$ generated by isolobal reactions, **656**, 228
Mössbauer
Synthesis and spectroscopic characterisation of compounds with formula $[\{Fe_2(SPh)_2(CO)_5\}Ph_2P(CH_2)_nPPh_2\{Fe(CO)_4\}]$ and $[\{Fe_2(SPh)_2(CO)_5\}_2Ph_2P(CH_2)_nPPh_2]$ (n = 3, 4 and 6), **642**, 40
The synthesis and structural characterization of some triorganotin(IV) complexes of 2-{[(*E*)-1-(2-hydroxyaryl)alkylidene]amino}acetic acid. Crystal and molecular structures of $Ph_3Sn(2\text{-}OHC_6H_4C(H)=NCH_2COO)$ and $Me_3Sn(2\text{-}OHC_6H_4C(CH_3)=NCH_2COO)$, **654**, 100
Mössbauer effect
Cofacial interaction of ferrocenyl groups and metal atom motional anisotropy in [10]annulene organometallics, **658**, 210
Mössbauer spectra
Lithiation of ferrocenylamines and vanadium dinitrogen chemistry, **664**, 245
Mössbauer spectroscopy
Preparation, characterization and properties of dipolar 1,2-*N*,*N*-dimethylaminomethylferrocenylsilanes, **654**, 187
MS
Coordination chemistry of tin: Part III. The crystal structure and thermal behavior of dipotassium dimethyl-tetrafluoro-stannate dihydrate, $K_2[(CH_3)_2SnF_4]\cdot 2H_2O$, **649**, 147
Multidentate
Iminophosphines: synthesis, formation of 2,3-dihydro-1*H*-benzo[1,3]azaphosphol-3-ium salts and *N*-(pyridin-2-yl)-2-diphenylphosphinoylaniline, coordination chemistry and applications in platinum group catalyzed Suzuki coupling reactions and hydrosilylations, **650**, 231
Multinuclear
Novel organotin halides. Organometallic substituted stannoles and alkene derivatives with tin–chlorine and tin–bromine bonds—exceptionally small magnitude of coupling constants $|^1J(^{119}Sn, ^{13}C)|$, **646**, 125
Reactivity of some poly-1-alkynylsilicon and -tin compounds towards triallylborane—routes to novel heterocycles, **657**, 146
Multinuclear NMR
Synthesis, spectroscopic and structural aspects of some tetraorganodistannoxanes with internally functionalized oxime: crystal and molecular structures of $[\{R_2Sn(ON=C(Me)py)\}_2O]_2$ (R = Bu^n and Et) and $2\text{-}NC_5H_4C(Me)=NOH$, **651**, 98
Multiple addition
Regioselective penta-addition of 1-alkenyl copper reagent to [60]fullerene. Synthesis of penta-alkenyl FCp ligand, **652**, 31
Multiple bonding
Some recent advances in the chemistry of silicon and its homologues in low coordination states, **646**, 39
Multistep reactions
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80

N-Allylamines
Catalytic isomerization of *N*-allylic substrates with chiral Os_3 clusters as potentially enantioselective reaction, **658**, 147
Nanomolecule
Organodiiron(II)-complexes containing a long conjugated hydrazonato spacer. Synthesis, characterization, electrochemical and structural studies, **660**, 71
Nanoparticles
Synthesis and characterization of monodisperse zinc and zinc oxide nanoparticles from the organometallic precursor $[Zn(C_6H_{11})_2]$, **643-644**, 307
Naphthalene derivatives
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, **643-644**, 68
Naphthalimide
Synthesis and luminescence properties of novel ferrocene–naphthalimides dyads, **645**, 168
Naphthyl imines
Regioselective activation of C–H bonds of naphthyl imines at platinum(II). Crystal structures of $[PtMe\{1\text{-}(2'\text{-}ClC_6H_4CH_2N\text{-}CH)C_{10}H_6\}PPh_3]$ and $[PtMe\{2\text{-}(2'\text{-}ClC_6H_4CH_2NCH)C_{10}H_6\}P\text{-}Ph_3]$, **642**, 171
Natural products
The directed *ortho* metalation—cross coupling symbiosis. Regioselective methodologies for biaryls and heterobiaryls. Deployment in aromatic and heteroaromatic natural product synthesis, **653**, 150
The directed synthesis of axially chiral ligands, reagents, catalysts, and natural products through the 'lactone methodology', **661**, 49
N-Cyanoazepine
High order cycloaddition reactions of $M(CO)_3$-coordinated *N*-cyanoazepine with alkynes; M: Cr, Mo, W, **651**, 132
N-donor
Structural and spectroscopic studies of carbene and N-donor ligand complexes of Group 13 hydrides and halides, **656**, 203
Neighbouring-group effects
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, **643-644**, 68
Neodymium
Synthesis of mixed phospholyl/cyclooctatetraenyl–lanthanide complexes. Crystal and molecular structure of (cyclooctatetraenyl)[3,4-dimethyl-2,5-bis(trimethylsilyl)-phospholyl](tetrahydrofuran)neodymium, **647**, 139
Neurotropic activity
Synthesis, molecular structure and biological activity of bromobenzylgermatranes, **659**, 165
Neutral oxygeneous Lewis bases
Coordination chemistry of polymercuramacrocycles. Complexation of cyclic trimeric perfluoro-*o*-phenylenemercury with neutral oxygeneous Lewis bases, **654**, 123
Neutron diffraction
A neutron diffraction study of $Cp_2Ti\{(\mu\text{-}H)_2BC_8H_{14}\}$, **654**, 216

N-functionalised cyclopentadienes
Coordination chemistry of neutral quinolyl- and aminophenylcyclopentadiene derivatives, **641**, 81
N-functionalized cyclopentadienyl ligands
Combining organometallic and Werner-type coordination sites in highly preorganized heterobimetallic systems, **641**, 113
N-fused porphyrin
Density functional studies on N-fused porphyrin. Electronic, magnetic and metal binding properties, **643-644**, 265
NHC
Synthesis and structural characterization of novel bridged platinum(II) biscarbene complexes, **660**, 121
N-Heterocyclic carbene complexes
Synthesis, coordination and reactivity of 2-(trimethylsiloxymethyl)phenyl- and 2-(hydroxymethyl)phenyl isocyanides, **662**, 70
N-Heterocyclic carbene ligand
Synthesis and structure of 1,2,4-triazol-2-ium-5-ylidene complexes of Hg(II), Pd(II), Ni(II), Ni(0), Rh(I) and Ir(I), **664**, 70
N-Heterocyclic carbenes
The first metal complexes of bis(diisopropylamino)carbene: synthesis, structure and ligand properties, **649**, 219
N-heterocyclic carbenes
Catalytic cross-coupling reactions mediated by palladium/nucleophilic carbene systems, **653**, 69
N-heterocyclic silylenes
Complexation of *N*-heterocyclic silylenes to Pd(0): formation of highly labile homoleptic complexes Pd[Si(^{t}BuNCH$_2$CH$_2$N-^{t}Bu)]$_4$ and Pd[Si(^{t}BuNCHCHN^{t}Bu)]$_3$, **649**, 141
Nickel
Cobalt and nickel complexes bearing 2,6-bis (imino) phenoxy ligands: syntheses, structures and oligomerization studies, **650**, 59
Facial coordination of cyclooctatetraene to a Co_2Ni triangle in a heterometallic trinuclear cluster complex, **641**, 142
Late transition metal complexes bearing 2,9-bis(imino)-1,10-phenanthrolinyl ligands: synthesis, characterization and their ethylene activity, **658**, 62
Oxidative insertion into the N–H bond of carbazole, indole and pyrrole with zerovalent metals, **664**, 170
Platinum- and nickel-catalyzed reactions of 1,2-dimethyl-1,2-diphenyl-1,2-disilacyclopentane with alkynes, **645**, 47
Synthesis and electrochemical behaviour of σ,η^2-acetylide-bridged early–late complexes;: The solid-state structure of [(η^5-$C_5H_4SiMe_3$)$_2$Ti($C{\equiv}CSiMe_3$)$_2$]Pd(PPh_3), **664**, 123
Synthesis and reactivity studies on alkyl–aryloxo complexes of nickel containing chelating diphosphines: cyclometallation and carbonylation reactions, **643-644**, 331
Synthesis, characterisation and catalytic activity of Pd(II) and Ni(II) complexes with new cyclic α-diphenylphosphino-ketoimines. Crystal structure of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclopentylidene)aniline and of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclohexylidene)aniline, **662**, 150
Synthesis of functionalized alkenes by transition metal-catalyzed carbostannylations of alkynes and dienes followed by cross-coupling reactions, **653**, 114
The activation of C–H bonds in internal alkenes and dienes by {NiCp} species formed in the reaction of nickelocene with alkali metals, **663**, 249
The formation and polymerization behavior of Ni(II) α-diimine complexes using various aluminum activators, **645**, 158
Nickel-catalyst
Scope and limitation of the nickel-catalyzed coupling reaction between lithium borates and mesylates, **653**, 91
Nickel catalyst
Catalytic asymmetric cross-coupling, **653**, 41
Nickelocene
Two nickelocenes and ferrocene in a rigid *cis/trans* chain, **658**, 266
Nickel–phosphine complex
Discovery of the cross-coupling reaction between Grignard reagents and C(sp^2) halides catalyzed by nickel–phosphine complexes, **653**, 23
Nido
The B–I activation in *o*-carborane clusters: their fate towards B–H. Easy synthesis of [7,10-$C_2B_{10}H_{13}]^-$, **642**, 16
nido Carborane derivatives
Retention of the B(3)–X (X = Br, I) bond in *closo*-*o*-carborane derivatives after nucleophilic attack. The first synthesis of [3-X-7-R-7,8-*nido*-$C_2B_9H_{10}]^-$ (X = Br, I). Crystal structure of [$HNMe_3$][3-I-7,8-*nido*-$C_2B_9H_{11}$], **657**, 217
Nido-carboranylmonosulfonium
Recent studies on RR′S·$C_2B_9H_{11}$ charge-compensated ligands: Crystal structures of 10-($S(CH_3)_2$)-7,8-$C_2B_9H_{11}$ and 10-($S(CH_2)_4$)-7,8-$C_2B_9H_{11}$, **657**, 247
Nido-carboranylphosphines
Phosphine–boranes incorporating the carborane cluster, **657**, 224
nido-carboranylthioethers
Synthesis and characterisation of the *exo*-*nido* molybdacarborane complex Mo(η-C_3H_5)(CO)$_2$(7,8-μ-SCH_2CH_2S-7,8-*nido*-$C_2B_9H_{10}$). Strong B–H–Mo 3-centre bonding, **663**, 221
Ni(II) tetraazamacrocyclic complexes
Electrocatalytic reduction of aldehydes and ketones on nickel(II) tetraazamacrocyclic complex-modified graphite felt electrode, **662**, 9
Niobium
Arylimido niobium(V) complexes: mononuclear and dendritic derivatives, **664**, 258
Dimers of highly π-loaded organoimido d^1 metal radicals of niobium, tantalum, molybdenum, tungsten, and rhenium: the context of the cyclopentadienyl imido ligand analogy, **655**, 96
Imide- and amide-supported Group 5 and 6 metallacarboranes, **657**, 9
Niobium, titanium, zirconium and hafnium complexes incorporating germanium bridged *ansa* ligands. X-Ray crystal structures of [Zr{$Me_2Ge(\eta^5$-$C_5Me_4)_2$}Cl_2] and [M{$Me_2Ge(\eta^5$-$C_5Me_4)(\eta^5$-$C_5H_4)$}Cl_2] (M = Zr, Hf), **656**, 129
Synthesis and electrochemistry of niobium complexes incorporating asymmetrically substituted *ansa*-ligands, **655**, 63
Niobocene
Synthesis and electrochemistry of niobium complexes incorporating asymmetrically substituted *ansa*-ligands, **655**, 63
Nitride
Porous boron nitride supports obtained from molecular precursors. Influence of the precursor formulation and of the thermal treatment on the properties of the BN ceramic, **657**, 98
Synthesis and molecular structure of the nitride (L_{OEt})Mo(N)Cl_2 [L_{OEt} = (η-C_5H_5)Co{$P(O)(OEt)_2$}$_3$], **662**, 59
Nitrile
Lithium phosphonium azayldiides $R_3P{=}NLi$. Applications in organic synthesis and coordination chemistry, **646**, 94
Nitrile exchange reactions of [WI(CO)(NCMe){$P(O^iPr)_3$}$_2$(η^2-MeC_2Me)][BPh_4]; X-ray crystal structures of [WI(CO)(L){$P(O^iPr)_3$}$_2$(η^2-MeC_2Me)][BPh_4] {L = NC^{i}Pr, NC^{t}Bu, $NCCH_2Ph$, 1,2-$C_6H_4(NCCH_2)_2$}, **664**, 37
Synthesis and reactions of the cationic seven-coordinate complexes, [$MoI(CO)_3$(NCR){$Ph_2P(CH_2)_nPPh_2$}][BF_4] (R = Me, *n* = 1, 2 and 3; R = Et, *n* = 1). Crystal structures of [$MoI_2(CO)_2(PPh_3)$-{$Ph_2P(CH_2)PPh_2$}], [$MoI(CO)_2${$Ph_2P(CH_2)PPh_2$}$_2$][BF_4]·CH_2Cl_2, [$MoCl_3O${$Ph_2PO(CH_2)OPPh_2$}] and [$Mo_3(\mu_3$-I)$_2${μ_2-$Ph_2P(CH_2)PPh_2$}$_3$]I, **664**, 45
Nitrile compounds
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile,

isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, **643-644**, 214
Nitrile oxide
1,3-Dipolar cycloaddition of alkynyliodonium salts with a nitrile oxide. Synthesis and reactivity of isoxazolyliodonium salts, **646**, 196
Nitroarenes
Ruthenium-catalyzed reductive cyclization of nitroarenes with trialkylamines leading to quinolines, **650**, 65
Nitrogen heterocycles
Coupling reactions of manganese(I) cyclometallated compounds derived from heterocyclic N-donor ligands with alkynes, **656**, 270
Nitrogen ligands
New complexes of palladium(II) with chelating heterocyclic nitrogen ligands. Characterization and catalytic activity in CO–styrene copolymerization. Crystal structure of $[Pd(bipy)_2][BAr'_4]_2$, $Ar' = [3,5\text{-}(CF_3)_2C_6H_3]$, **664**, 77
Nitrones
Synthesis of unsymmetrical 1,1′-disubstituted ferrocenes. Formation of ferrocenophanes via intramolecular cycloaddition, **654**, 117
Nitro substituents
One-pot dodecanitration of Zn(II) and Ni(II) *meso*-tetrakis-(2,6-dichlorophenyl) porphyrin, and extreme redox properties of the obtained complexes, **643-644**, 522
Nitrosyl complexes
One step substitution of NO and Cl by a metal-S-C-N-ring in $CpCr(NO)_2Cl$: synthesis and molecular structure of $CpCr(NO)$'DMPYS' ($Cp = \pi\text{-}C_5H_5$; DMPYS = 4,6-dimethylpyrimidine-2-thiolato), **656**, 177
N Ligands
Arylimido niobium(V) complexes: mononuclear and dendritic derivatives, **664**, 258
Azanonaborane-pyridine derivatives $[(R'C_5H_4N)B_8H_{11}NHR'']$: synthesis, structure and some molecular-orbital calculations, **657**, 205
Cyclopentadienyl complexes of yttrium and the lanthanides with bis(phosphinimino)methanides, **647**, 123
Iron(II) complexes containing poly(1-pyrazolyl)methane ligands, **655**, 146
Phosphane- and phosphorane *Janus Head* ligands in metal coordination, **661**, 111
NMR
η^1-Alkynylplatinum(II) complexes with cycloocta-1,5-diene and tri(1-cyclohepta-2,4,6-trienyl)phosphane ligands, **641**, 173
Coordination chemistry of tin: Part III. The crystal structure and thermal behavior of dipotassium dimethyl-tetrafluoro-stannate dihydrate, $K_2[(CH_3)_2SnF_4]\cdot 2H_2O$, **649**, 147
From bis(silylamino)tin dichlorides via di(1-alkynyl)-bis(silylamino)tin to new heterocycles by 1,1-organoboration, **649**, 232
Novel organotin halides. Organometallic substituted stannoles and alkene derivatives with tin–chlorine and tin–bromine bonds—exceptionally small magnitude of coupling constants $|^1J(^{119}Sn, ^{13}C)|$, **646**, 125
Organotin(IV) derivatives of novel β-diketones: Part V. Synthesis and characterization of di- and triorganotin(IV) derivatives of 4-acyl-5-pyrazolones modified in position 3 of the pyrazole. Crystal structure of (1,3-diphenyl-4-benzoyl-pyrazolon-5-ato)triphenyltin(IV), **645**, 134
Reactivity of some poly-1-alkynylsilicon and -tin compounds towards triallylborane—routes to novel heterocycles, **657**, 146
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), **643-644**, 441
The synthesis and structural characterization of some triorganotin(IV) complexes of 2-{[(*E*)-1-(2-hydroxyaryl)alkylidene]amino}acetic acid. Crystal and molecular structures of $Ph_3Sn(2\text{-}OHC_6H_4C(H)=NCH_2COO)$ and $Me_3Sn(2\text{-}OHC_6H_4C(CH_3)=NCH_2COO)$, **654**, 100
Triorganoantimony(V) complexes with internally functionallized oximes: synthetic, spectroscopic and structural aspects of $[R_3Sb(Br)L]$, $[R_3Sb(OH)L]$ and $[R_3SbL_2]$, crystal and molecular structures of $[Me_3Sb\{ON=C(Me)C_4H_3O\}_2]$, $[Me_3Sb\{ON=C(Me)C_4H_3S\}_2]$, $2\text{-}OC_4H_3C(Me)=NOH$ and $2\text{-}SC_4H_3C(Me)=NOH$, **645**, 118
X-ray analysis and structural characterization of 2-phenyl-6-aza-1,3-dioxa-2-borabenzocyclononenones, **657**, 194
NMR multinuclear
Hexa(1-alkynyl)disilanes. Synthesis, structure and 1,1-ethylboration, **656**, 97
NMR spectra
A dimeric gold(I) triphospholyl complex, **643-644**, 357
Coordination chemistry of polymercuramacrocycles. Complexation of cyclic trimeric perfluoro-*o*-phenylenemercury with neutral oxygeneous Lewis bases, **654**, 123
Syntheses and properties of some *exo*,*exo*-bis(isodicyclopentadienyl)titanium low-valent complexes, **656**, 81
Ytterbium(II) amides and crown ethers: addition versus amide substitution, **647**, 198
NMR-spectra
Generation of $[1,2\text{-}(CH_2)_2C_5Me_3MC_5Me_4CH_2\text{-}1']^{3+}$ (M = Ru, Os) trications and determination of their structures by comparing NMR-spectra with density-functional method calculations, **645**, 87
NMR spectroscopy
A comparison of the ligating properties of the mixed P/O- and P/S-donor ligands $Ph_2P(CH_2)_2O(CH_2)_2O(CH_2)_2PPh_2$ and $Ph_2P(CH_2)_2S(CH_2)_2S(CH_2)_2PPh_2$ with Group 6 and 7 carbonyls, **655**, 55
A tetrameric copper(I) alkoxide with a π-tethered ligand: 2-allyl-6-methylphenoxocopper(I), **649**, 204
Catalytic reduction of acetophenone with transition metal systems containing chiral bis(oxazolines), **659**, 186
Chemistry on a metallathiaborane cluster Part 4: reactions of 11-vertex rhodathiaboranes with bidentate phosphines and their subsequent rearrangements, **657**, 40
Dihydrogen bonding of decahydro-*closo*-decaborate(2−) and dodecahydro-*closo*-dodecaborate(2−) anions with proton donors: experimental and theoretical investigation, **657**, 155
Dimethylplatinum(II) and tetramethylplatinum(IV) complexes of 1-methyl-(2-alkylthiomethyl)-1*H*-benzimidazoles: experimental and DFT-calculated structures and NMR spectra, **655**, 218
Facile syntheses of new multidentate (phosphino)amines: X-ray structure of $1,4\text{-}\{(OC)_4Mo(Ph_2P)_2NCH_2\}_2C_6H_4$, **664**, 294
Osmacycles containing the $\{(Ph_2PE)_2N\}^-$ ligand (E = S or Se): synthesis and crystal structures, **664**, 85
Silicon-lead chalcogenides of the types $Me_4Si_2(E)_2PbPh_2$ and $Ph_2Pb(E)_2Si_2Me_2(E)_2PbPh_2$ (E = S, Se) and related compounds containing tin and antimony, **648**, 220
Synthesis and structural behavior of the P-functional organotin chlorides $[Ph_2P(CH_2)_3]_2SnCl_2$, $Ph_2P(CH_2)_3SnCl_2Me$, and $Ph_2P(CH_2)_nSnCl_3$ ($n = 2, 3$), **650**, 25
Two nickelocenes and ferrocene in a rigid *cis*/*trans* chain, **658**, 266
NMR study
Bis(oligosilanyl)chalcogenides $[(Me_3Si)_xMe_{3-x}Si]_2E$, alkalimetal oligosilanylchalcogenolates $(Me_3Si)_xMe_{3-x}Si\text{–}EM^I$ and oligosilanylchalcogenols $(Me_3Si)_xMe_{3-x}Si\text{–}EH$ (E = S, Se, Te): Syntheses and NMR study, **660**, 36
N,*N*-dialkylcarbamato
Organometallic complexes of ruthenium(II) with *N*,*N*-dialkylcarbamato as the supporting ligand, **651**, 52
N,*N*′-dicyano 4-4′-diaminobiphenyl
Synthetic, spectral, electrochemical and structural aspects of some Ru(II) arene complexes with some novel bridging ligands, **648**, 27

1,2-*N*,*N*-Dimethylaminomethylferrocenyl
Preparation, characterization and properties of dipolar 1,2-*N*,*N*-dimethylaminomethylferrocenylsilanes, **654**, 187
N,*N*′-ethylenebis(acetylacetoneiminato)dianion Schiff base ([acacen]$^{2-}$)
A theoretical analysis of [M(tmtaa)] and [M(acacen)] fragments employed in the organometallic chemistry of early transition metals, **648**, 14
N,N′Ferrocenyl ligands
Heterodimetallic palladium(II) compounds containing terdentate [Csp^2(ferrocene),N,N′]$^-$ ferrocenyl ligands, **651**, 105
N,*N*,*N*-Tris((*R*)-2-phenylethanol)amine
Syndiotactic polystyrene with very high molecular weight produced by sterically and electronically modified catalyst, **655**, 186
NO-complexes of chromium
One step substitution of NO and Cl by a metal-S-C-N-ring in $CpCr(NO)_2Cl$: synthesis and molecular structure of $CpCr(NO)$'DMPYS' (Cp = π-C_5H_5; DMPYS = 4,6-dimethylpyrimidine-2-thiolato), **656**, 177
Nonbridged bis(1-*R*-indenyl) ligand
Synthesis and characterization of planarly chiral nonbridged bis(1-*R*-indenyl) zirconium dichloride complexes and X-ray structure of *rac*-[(η^5-C_9H_6-1-$C(CH_3)_2$–*o*-C_6H_4–OCH_3)$_2ZrCl_2$]·THF, **650**, 114
Non-coordinating anion
Synthesis and structural characterization of $[H(OEt_2)_2]^+[(C_3H_3N_2)\{B(C_6F_5)_3\}_2]^-$ — a Brønsted acid with an imidazole-derived 'non-coordinating' anion, **641**, 148
Nonlinear optics
Chiral organometallic chromophores for nonlinear optics derived from $[Fe_2(\eta^5\text{-}C_5H_5)_2(CO)_2(\mu\text{-}CO)(\mu\text{-}C\text{–}CH_3)]^+$ $[BF_4]^-$, **655**, 70
Organometallic complexes for nonlinear optics: Part 25. Quadratic and cubic hyperpolarizabilities of some dipolar and quadrupolar gold and ruthenium complexes, **642**, 259
Norcaradiene
[8+2] Cycloaddition of 8-oxoheptafulvene with cycloheptatriene-$Fe(CO)_3$: synthesis of tricarbonyl[(2,3,4,5-η)-11-acetoxy-1*H*-cyclohept[*a*]azulene]iron, **642**, 80
N[Te(X)NSN)$_3$, X = F, Cl
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Nuclear medicine
Synthesis of functional derivatives of the [3,3′-Co(1,2-$C_2B_9H_{11})_2]^-$ anion, **649**, 1
Nuclear waste
Synthesis of $[B_{12}H_{12}]^{2-}$ based extractants and their application for the treatment of nuclear wastes, **657**, 83
Nucleophilic addition
Addition of organolithium compounds to tricarbonyl(tropone)iron complexes: experimental and structural studies, **659**, 176
Reactions of $[(PPh_3)_2Pt(\eta^3\text{-}CH_2CCPh)]^+$ with oxygen nucleophiles and chemistry of resultant $[(PPh_3)_2Pt(\eta^3\text{-}CH_2C(OR)CHPh)]^+$ complexes, **655**, 192
Regioselective addition of secondary phosphine oxides to 3-(trialkylsilyl)- and 3-(trialkylgermyl)-2-propynals, **659**, 172
Stereoselective addition reactions of ruthenium thioaldehyde complexes, **661**, 129
Nucleophilic substitution
Alkylderivatives of Stanna-*closo*-dodecaborate, **664**, 116
Preparation and organic transformation reactions of $CpFe(CO)_2SCO$–3-C_6H_4–SO_2Cl, **664**, 228
Synthesis of Sb-chiral organoantimony compounds having intramolecular Sb···N interaction and their separation into optically pure compounds via *ortho*-palladated benzylamine complexes, **656**, 234
Nucleoside
Synthesis and electrochemistry of 5-ferrocene-glucosamide, 5-ferrocene-glucosamide phosphate and 5-ferrocene-amido-5-adenosine in aqueous solution, **648**, 81
Nucleotides
The phosphorofluoroamidite approach to mixed phosphites, **643-644**, 490

o-Carboranes
Pd(II) bromide complexes of 1,2-bis(diphenylphosphino)-1,2-dicarba-*closo*-dodecaborane. Crystal structures of $[PdBr_2(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CH_2Cl_2$, $[PdBr_{1.133}Cl_{0.867}(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CH_2Cl_2$ and $[PdBrCl_{0.541}Me_{0.459}(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CHCl_3$, **657**, 187
Study of the *o*-carboranyl fragment as an uncommon substituent. Crystal structures of $[PdClMe(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CH_2Cl_2$ and $[PdClMe(1,2\text{-}(P^iPr_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]$, **645**, 39
Octamethylcyclosiloxane
Bis(trifluoromethane)sulfonimide initiated ring-opening polymerization of octamethylcyclotetrasiloxane, **646**, 171
Octamethylferrocenylmethanol (^{57}Fe)
Metal atom motion, vibrational anisotropy and hydrogen bonding effects in octamethylferrocenylmethanol, **642**, 203
Octasilsesquioxane
Octakis[(2,2,6,6-tetramethylpiperidino)methyl]octasilsesquioxane: synthesis and crystal structure analysis of a new aminoorganyl-functionalized octasilsesquioxane, **646**, 200
Odd carbon bridges
Carbon chain bridged metals: a theoretical approach. Odd chains, **656**, 156
Ohira-alkynylation
A simple route to (tetraethynylcyclobutadiene)cyclopentadienylcobalt, **652**, 21
Olefin
Non-hindered ansasamarocenes, versatile catalysts for diene/olefin/polar monomer copolymerisations. What is really the active species?, **647**, 167
Synthesis, characterisation and molecular structure of $[Rh(COE)_2(acac)]$ (COE = cyclooctene, η^2-C_8H_{14}), an important starting material for the preparation of rhodium catalyst precursors, **649**, 199
Olefin complexes
Coordinated olefins, H_2C=CHR, and phosphanes, PH_2R: a theoretical study of the R substituent effect, **643-644**, 285
Coordination chemistry of neutral quinolyl- and aminophenylcyclopentadiene derivatives, **641**, 81
Olefin metathesis catalysts
An 'Old Hydride' in a new synthesis: a convenient approach to Grubbs-type carbene complexes $(PPh_3)_2Cl_2Ru$=CH–CH=CR_2 and their hexacoordinate acetonitrile adducts, **641**, 220
Olefin polymerisation
On the mechanism of olefin polymerisation with titanium β-diketonato complexes. A model density functional study, **648**, 126
Olefin polymerization
Hydrazonide titanium derivatives: Synthesis, characterization and catalytic activity in olefin polymerization. Molecular structure of $[Ti(\eta^5\text{-}C_5H_4SiMe_3)Cl(\mu\text{-}N_2CPh_2)]_2$, **663**, 173
Novel 2-indenyl *ansa*-zirconocenes for the polymerization of α-olefins, **654**, 29
Olefins
Organo-rare-earth-metal initiated living polymerizations of polar and nonpolar monomers, **647**, 128
Oxidation of olefins by palladium(II). 18. Effect of reaction conditions, substrate structure and chiral ligand on the bimetallic palladium(II) catalyzed asymmetric chlorohydrin synthesis, **656**, 168

μ6–OLi_6 coordination
Tetrakis[lithium-*tert*-butyl(di-*tert*-butylfluorosilyl)amide]-dilithium oxide, ($^tBu_2SiF–NLi^tBu)_4Li_2O$—a Li_6O^{4+}-cluster, **646**, 134
Oligomerization
The reaction of $[H_4Ru_4(CO)_{12}]$ with 1-penten-3-yne: dimerization and trimerization through the triple bonds, **649**, 43
Oligonuclear
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Oligonuclear ferrocene complexes
Stepwise assembly and structural characterization of oligonuclear ferrocene aggregates with boron–nitrogen backbone, **664**, 94
Oligosilanes
Synthesis of di- and trisilanes with potentially chelating substituents, **649**, 25
Oligothiophenes
C–C Cross-coupling reactions for the combinatorial synthesis of novel organic materials, **653**, 200
Open metallocene
Synthesis, spectroscopy, and structural characterization of carbonyl and cage phosphite adducts of edge-bridged open metallocenes, **655**, 158
Optical resolution
Synthesis of Sb-chiral organoantimony compounds having intramolecular Sb···N interaction and their separation into optically pure compounds via *ortho*-palladated benzylamine complexes, **656**, 234
Orbital
DFT studies of some structures and reactions of lanthanides complexes, **647**, 190
Organic electroluminescent devices
Cross-coupling reactions in the chemistry of silole-containing π-conjugated oligomers and polymers, **653**, 223
Organic halide
A reminiscence and a future prospect of transition metal-catalyzed cross-coupling processes, **653**, 5
Organic halides
A historical note of the Stille reaction, **653**, 50
Cross-coupling reactions via organoboranes, **653**, 83
Organic materials
C–C Cross-coupling reactions for the combinatorial synthesis of novel organic materials, **653**, 200
Organic synthesis
A novel and convenient preparation of hypophosphite esters, **643-644**, 154
Organic triflates
Cross-coupling reactions via organoboranes, **653**, 83
Organo Al(I) and (II)
Organoaluminum chemistry with low valent aluminum — recent developments, **646**, 4
Organobismuth
A structural and mechanistic investigation of the mono-*O*-phenylation of diols with $BiPh_3(OAc)_2$, **662**, 98
Organobismuth compounds
Cross-coupling reaction of organobismuth dialkoxides with aryl bromides and iodides catalyzed by $Pd(PPh_3)_4$, **659**, 117
Organoboranes
Cross-coupling reactions via organoboranes, **653**, 83
Novel organotin halides. Organometallic substituted stannoles and alkene derivatives with tin–chlorine and tin–bromine bonds—exceptionally small magnitude of coupling constants $|^1J(^{119}Sn, ^{13}C)|$, **646**, 125
Syntheses with organoboranes. XIII. Synthesis of ω-(4-bromophenyl)alkanoic acids and their borylation, **657**, 129
Organoboration
Hexa(1-alkynyl)disilanes. Synthesis, structure and 1,1-ethylboration, **656**, 97
Reactivity of some poly-1-alkynylsilicon and -tin compounds towards triallylborane—routes to novel heterocycles, **657**, 146
1,1-Organoboration
Novel organotin halides. Organometallic substituted stannoles and alkene derivatives with tin–chlorine and tin–bromine bonds—exceptionally small magnitude of coupling constants $|^1J(^{119}Sn, ^{13}C)|$, **646**, 125
Novel titana-2,4-cyclopentadienes by 1,1-alkylboration, **649**, 225
Organoboron compounds
Cross-coupling reaction of organoboron compounds via base-assisted transmetalation to palladium(II) complexes, **653**, 54
Rhodium-catalyzed coupling of sodium tetraphenylborate with acid anhydrides in the presence or absence of norbornene, **648**, 297
Organochalcogen
Synthesis and reactivity of organochalogen ester substituted η^3-butadienyl complexes of Mo(II): crystal structure of $[MoCl(CO)_2(\eta^3\text{-}CH_2C(COSePh)C{=}CH_2)(1,10\text{-phenanthroline})]\cdot 0.5\ CH_2Cl_2$, **664**, 277
Organocobalt
Attachment to manganese or cobalt of a bulky tri(organosilyl)methyl ligand containing an NMe_2 or an OMe donor group, **649**, 121
Organocopper reagent
Regioselective penta-addition of 1-alkenyl copper reagent to [60]fullerene. Synthesis of penta-alkenyl FCp ligand, **652**, 31
Organoimides
Bis(pentafluorophenyl)mercury—a versatile synthon in organo-, organooxo-, and organoamido-lanthanoid chemistry, **647**, 50
Organolanthanide
Hydrosilylation of alkynylsilanes utilizing organolanthanide and Group 3 metallocene complexes, **647**, 225
Insertions into lanthanide–ligand bonds in organolanthanide chemistry, **647**, 28
Synthesis, structure and reactivity of *tert*-butyldimethylsilylcyclopentadienyl lanthanide chlorides, including crystal structures of $[(C_5H_4SiMe_2Bu^t)_2Gd(\mu\text{-}Cl)]_2$ and $(C_5H_4SiMe_2Bu^t)_2Er(SBT)(THF)$, **655**, 120
Organolanthanides
Organolanthanides RLnX (R is alkyl, aryl, X is halogen) and lanthanide complexes with aromatic hydrocarbon dianions: synthesis, structure, and reactivity, **647**, 21
Synthesis, characterization of homoleptic lanthanide amidinate complexes and their catalytic activity for the ring-opening polymerization of ε-caprolactone, **662**, 144
Organolanthanoid complex
Synthesis and reactivity of organolanthanoid complexes containing N and S ligands, **647**, 180
Organolithium
Enantiomerically enriched 'carbanions': Studies on the stereochemical course of selective transformations of metal alkyls, **661**, 149
Lithiophenylalkyllithiums: new dilithium reagents having both sp^2- and sp^3-hybridised remote carbanionic centres, **663**, 21
Organolithium compounds
Palladium-catalyzed cross-coupling reaction of organic halides with Grignard reagents, organolithium compounds and heteroatom nucleophiles, **653**, 27
Organolithiums
Synthesis of heterocycles by cyclization of unsaturated organolithiums: a review, **646**, 59
Organomagnesium compounds
Tin–magnesium transmetallation reactions, **655**, 111

Organomanganese
Attachment to manganese or cobalt of a bulky tri(organosilyl)methyl ligand containing an NMe_2 or an OMe donor group, **649**, 121
Organometallic
Recent advances in f element reduction chemistry, **652**, 61
The expansion of divalent organolanthanide reduction chemistry via new molecular divalent complexes and sterically induced reduction reactivity of trivalent complexes, **647**, 2
Organometallic chemistry
Enantiomerically enriched 'carbanions': Studies on the stereochemical course of selective transformations of metal alkyls, **661**, 149
Organometallic clusters
Chemical applications of topology and group theory. Part 36. Deltahedral and fused deltahedral organometallic gallium and indium clusters, **646**, 146
Organometallic complexes
Organometallic complexes of ruthenium(II) with *N*,*N*-dialkylcarbamato as the supporting ligand, **651**, 52
Organometallic compounds
Synthesis of Group 10 polyfluorothiolate mono- and bi-nuclear complexes. Crystal structures of $[Ni(SC_6HF_4)_2(dppe)]$, $[(dppe)Ni(\mu\text{-}SC_6HF_4)_2Pd(C_6F_5)_2]$ and $[(dppe)Ni(\mu\text{-}SC_6F_5)_2Pd(C_6F_5)_2]$, **663**, 98
Organometallic polycondensation
Cross-coupling reactions for preparation of π-conjugated polymers, **653**, 195
Organometallic polymers
Directing role of anions in the syntheses of the silver–alkynyl cages $[Ag_{14}(C{\equiv}C^tBu)_{12}X][BF_4]$ (X = F, Cl, Br) and silver–alkynyl polymers $[Ag_3(C{\equiv}C^tBu)_2(X)]_n$ (X = Tos, NO_3), **652**, 87
Organometallic precursor
Synthesis and characterization of monodisperse zinc and zinc oxide nanoparticles from the organometallic precursor $[Zn(C_6H_{11})_2]$, **643-644**, 307
Organometallic synthesis
Synthesis of new half sandwich tetrachloro derivatives of molybdenum(V) and tungsten(V). X-ray structures of $(C_5HPr^i_4)W(CO)_3(CH_3)$ and $(C_5Et_5)WCl_4$, **654**, 109
Organometallic π-tweezer
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Organometals containing Zn, Al, Zr, and Mg
A genealogy of Pd-catalyzed cross-coupling, **653**, 34
Organophosphine
Transition metal mediated routes to poly(arylphosphine)s: investigation of novel phosphorus containing conjugated polymers, **653**, 167
Organoplatinum compounds
Structures of $Pt_2(CH_3)_4(S(CH_3)_2)_2$ and $[PtPh_2(S(CH_3)_2)]_n$ ($n = 2$, 3), **648**, 302
Organosilicon chemistry
The quest for triplet ground state silylenes, **646**, 68
Organosilylboranes
Regio- and stereoselective addition of sterically hindered silylboranes to terminal alkynes, **646**, 179
Organostannane
Synthesis of functionalized alkenes by transition metal-catalyzed carbostannylations of alkynes and dienes followed by cross-coupling reactions, **653**, 114
Organotellurium
Synthesis, characterization and X-ray structures of bis(arytelluro)-ethynes, **654**, 91
Organotellurium carboxylates
$C(sp^3)$–H···O and $C(sp^2)$–H···O hydrogen bonds in acyclic- and cyclic-organotellurium carboxylates, **649**, 70
Organotellurium halides
Synthesis and characterization of monomeric diorganotellurium dihalides: crystal and molecular structures of diphenacyltellurium dibromide and -diiodide, **658**, 169
Organotellurium triiodides
Crystal and molecular structure of (α-naphthyl)TeI_3, **664**, 306
Organotin
Novel organotin halides. Organometallic substituted stannoles and alkene derivatives with tin–chlorine and tin–bromine bonds—exceptionally small magnitude of coupling constants $|^1J(^{119}Sn, ^{13}C)|$, **646**, 125
Observation of inter- and intramolecular C–H···F hydrogen bonding in Gingras' salt: $[n\text{-}Bu_4N]^+[Ph_3SnF_2]^-$, **648**, 204
Synthesis and structural behavior of the P-functional organotin chlorides $[Ph_2P(CH_2)_3]_2SnCl_2$, $Ph_2P(CH_2)_3SnCl_2Me$, and $Ph_2P(CH_2)_nSnCl_3$ ($n = 2$, 3), **650**, 25
The synthesis and structural characterization of some triorganotin(IV) complexes of 2-{[(*E*)-1-(2-hydroxyaryl)alkylidene]amino}acetic acid. Crystal and molecular structures of $Ph_3Sn(2\text{-}OHC_6H_4C(H){=}NCH_2COO)$ and $Me_3Sn(2\text{-}OHC_6H_4C(CH_3){=}NCH_2COO)$, **654**, 100
Organotin compounds
Reactions of organotin(IV) compounds with platinum complexes. Part(III). Reactions of $(R_2Sn)_n$, (R = Me or Ph, $n = 6$; R = Et, $n = 9$) with platinum complexes, **654**, 21
Tin–magnesium transmetallation reactions, **655**, 111
Organotin(IV)
Synthesis and reactivity of Group 6 metal carbonyl complexes containing bis(triazol-1-yl)methane: linkage coordination polymers, **642**, 179
Organotin(IV) compounds
Solution and solid state structural investigations of organotin(IV) compounds containing asymmetric imidodiphosphinato ligands. X-ray structures of $R'_2Sn[(OPMe_2)(OPPh_2)N]_2$ (R = Me, Me, Bu^n, Ph), **642**, 71
Synthesis and crystal structures of new complexes of di- and tribenzyltin *N*-ethyl and *N*-benzyl-2-amino cyclopent-1-ene-1-carbodithioates, **645**, 105
Organoyttrium
Hydrosilylation of alkynylsilanes utilizing organolanthanide and Group 3 metallocene complexes, **647**, 225
ortho-Hydroxylation
Structural and mechanistic studies of the copper(II)-assisted *ortho*-hydroxylation of benzoates by trimethylamine N-oxide, **641**, 70
Orthometallated
Synthesis, characterization and catalytic activity in Heck-type reactions of orthometallated Pd^{II} and Pt^{II} complexes derived from (1*R*,2*R*)-1,2-diaminocyclohexane, **650**, 157
Ortho-metallation
CH and PC bond activations of PMe_2Ph ligands by an octahedral Ru_6 cluster, **651**, 124
Osmabenzyne
Electronic reason for the stabilization of osmabenzyne, **658**, 9
Osmacycle
Osmacycles containing the $\{(Ph_2PE)_2N\}^-$ ligand (E = S or Se): synthesis and crystal structures, **664**, 85
Osmium
Catalytic isomerization of *N*-allylic substrates with chiral Os_3 clusters as potentially enantioselective reaction, **658**, 147
Generation of $[1,2\text{-}(CH_2)_2C_5Me_3MC_5Me_4CH_2\text{-}1']^{3+}$ (M = Ru, Os) trications and determination of their structures by comparing NMR-spectra with density-functional method calculations, **645**, 87

Reactivity of osmium–rhodium mixed-metal cluster [$Os_3Rh(\mu\text{-}H)_3(CO)_{12}$] towards vinyl containing ligands, **659**, 151
Syntheses and structures of dimethylamino-bridged bis(silylene)ruthenium and -osmium complexes, **645**, 235
Tris(*N*-pyrrolyl)phosphine complexes of osmium(II) and osmium(0), **643-644**, 168
Oxacycloalkenyl complexes
Synthesis and characterization of 2-oxacycloalkylideneruthenium(II) complexes: X-ray crystal structure of the 2-oxacycloheptylidene complex [$Ru\{=\overline{COCH_2(CH_2)_3CH_2}\}(\eta^5\text{-}C_9H_7)(PPh_3)_2][PF_6]\cdot CH_2Cl_2$, **651**, 22
Oxacycloalkylidene complexes
Synthesis and characterization of 2-oxacycloalkylideneruthenium(II) complexes: X-ray crystal structure of the 2-oxacycloheptylidene complex [$Ru\{=\overline{COCH_2(CH_2)_3CH_2}\}(\eta^5\text{-}C_9H_7)(PPh_3)_2][PF_6]\cdot CH_2Cl_2$, **651**, 22
1,3,2-Oxathiastannolane
Dimeric dithiocarbamates of stannolane. An example of the presence of secondary bonds in the formation of an inorganic ring. Molecular and crystal structure of 2-*n*butyl-2-(dimethyldithiocarbamate)-1,3,2-oxathiastannolane and 2-*n*butyl-2-(piperidyldithiocarbamate)-1,3,2-oxathiastannolane, **654**, 51
η^3-Oxatrimethylenemethane
Reactions of $[(PPh_3)_2Pt(\eta^3\text{-}CH_2CCPh)]^+$ with oxygen nucleophiles and chemistry of resultant $[(PPh_3)_2Pt(\eta^3\text{-}CH_2C(OR)CHPh)]^+$ complexes, **655**, 192
Oxazolines
4-Ferrocenyl-1,3-oxazoline derivatives as ligands for catalytic asymmetric allylation reactions, **660**, 62
Oxidation
Catalytic oxidation of alcohols with allyl diethyl phosphate and palladium acetate, **650**, 151
Oxidation of primary and secondary alcohols catalyzed by a pentamethylcyclopentadienyliridium complex, **649**, 289
Preparation and properties of dinuclear bis[dicarbonyl(cyclopentadienyl)]diiron(II) complexes with S–S coupled, dimerized sulfur-rich dithiolate ligands, **645**, 94
The reactivity of new (1,5-cyclooctadiene)rhodium acylpyrazolonates towards N- and P-donor ligands: X-ray structures of [Rh(1,5-COD)Q^s], [Rh(1,5-COD)(phen)]$Q^s\cdot 0.5H_2O$ (HQ^s = 1-phenyl-3-methyl-4-(2-thenoyl)-pyrazol-5-one) and [Rh(1,5-COD)Br]$_2$, **651**, 5
Oxidative addition
Iridium-containing cumulenes: how to prepare and how to use, **661**, 137
Oxidative-addition
Reaction of $[RhCl(CO)_2]_2$ or $[RhCl(COD)]_2$ with *o*-(diphenylphosphino)benzaldehyde. Formation of hemiaminals in the subsequent reaction with dihydrazones, **648**, 149
Oxidative addition
A reminiscence and a future prospect of transition metal-catalyzed cross-coupling processes, **653**, 5
Discovery of the cross-coupling reaction between Grignard reagents and C(sp^2) halides catalyzed by nickel–phosphine complexes, **653**, 23
Mechanism of the oxidative addition of Pd^0 complexes generated from $Pd^0(dba)_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, **643-644**, 416
Synthesis of functionalized alkenes by transition metal-catalyzed carbostannylations of alkynes and dienes followed by cross-coupling reactions, **653**, 114
The B–I activation in *o*-carborane clusters: their fate towards B–H. Easy synthesis of $[7,10\text{-}C_2B_{10}H_{13}]^-$, **642**, 16
Oxidative decarbonylation
The first carbene-*C*,*N* chelate tetracarbonyl dihalogeno and carbene-*C*,*O* chelate tetracarbonyl benzochinone tungsten complexes, **651**, 66
Oxidative dimerization
Highly selective synthesis of biphenyl by the $Pd(OAc)_2$/HPA/O_2/AcOH catalyst system, **664**, 59
Oxime derived palladacycles
Cross-coupling reactions with boronic acids in water catalysed by oxime-derived palladacycles, **663**, 46
Oximes
Triorganoantimony(V) complexes with internally functionallized oximes: synthetic, spectroscopic and structural aspects of $[R_3Sb(Br)L]$, $[R_3Sb(OH)L]$ and $[R_3SbL_2]$, crystal and molecular structures of $[Me_3Sb\{ON=C(Me)C_4H_3O\}_2]$, $[Me_3Sb\{ON=C(Me)C_4H_3S\}_2]$, 2-$OC_4H_3C(Me)=NOH$ and 2-$SC_4H_3C(Me)=NOH$, **645**, 118
Oxo complexes
Vibrational spectroscopic and force field studies of (η^5-Cp)ML_3-type complexes (M = Mn, Re; L = CO, O), **642**, 246
8-Oxoheptafulvene
[8+2] Cycloaddition of 8-oxoheptafulvene with cycloheptatriene-$Fe(CO)_3$: synthesis of tricarbonyl[(2,3,4,5-η)-11-acetoxy-1*H*-cyclohept[*a*]azulene]iron, **642**, 80
Oxonium
Synthesis of $[B_{12}H_{12}]^{2-}$ based extractants and their application for the treatment of nuclear wastes, **657**, 83
Oxyfunctionalization
Catalytic oxidations by peroxy, peroxo and oxo metal complexes: an interdisciplinary account with a personal view, **661**, 3
Oxygen
Oxidation of tetraaryldistibanes: syntheses and crystal structures of diarylantimony oxides and peroxides, $(R_2Sb)_2O$, $(R_2Sb)_4O_6$ and $(R_2SbO)_4(O_2)_2$ (R = Ph, *o*-Tol, *p*-Tol), **648**, 209
Transition metal-catalyzed oxidations of bishomoallylic alcohols, **661**, 67
Oxygen quenching
Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, **643-644**, 89
Oxygen-transfer mechanism
Catalytic oxidations by peroxy, peroxo and oxo metal complexes: an interdisciplinary account with a personal view, **661**, 3

P-acetylenic
Synthesis and reactivity of P-acetylenic (silylamino)phosphines, **646**, 223
Pacman porphyrins
Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, **643-644**, 89
Palladacycles
Regioselective palladation of 2-oxazolinyl-[2.2]paracyclophanes. Synthesis of planar-chiral phosphines, **662**, 23
Palladium
A hexacarbene complex derived from 1,1′-methylenebis(4-butyl-1*H*-1,2,4-triazolium) diiodide. Synthesis, characterization and catalytic activity, **660**, 50
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Catalytic cross-coupling reactions mediated by palladium/nucleophilic carbene systems, **653**, 69
Cross-coupling reaction of organobismuth dialkoxides with aryl bromides and iodides catalyzed by $Pd(PPh_3)_4$, **659**, 117
Cyclopalladated compounds with a bidentate [C, N]/terdentate [C, N, S] benzylidenethiophene imine ligand. Crystal and molecular structures of $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H)=NCH_2(C_4H_3S)\}(\mu\text{-}OAc)]_2$, $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H)=NCH_2(C_4H_3S)\}(Cl)(PPh_3)]$ and $[\{Pd[2,3\text{-}(MeO)_2C_6H_2C(H)=NCH_2(C_4H_3S)](Cl)\}_2(\mu\text{-}Ph_2P(CH_2)_4PPh_2)]$, **654**, 162

Cyclopalladation of Schiff bases from phenylalanine and 2-phenylglicine, **663**, 277
Development of new palladium catalysts for the alkoxycarbonylation of aryl chlorides, **641**, 30
Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, **643-644**, 12
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, **643-644**, 19
Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, **643-644**, 136
Isolation and structural characterization of some stable Pd(II) carboxylate complexes supported by 1,1′-bis(diphenylphosphino) ferrocene (dppf), **658**, 159
Isomerism of (π-1,3-dimethylallyl)(phosphinooxazoline)Pd complexes: a comparison between experiment and theory, **641**, 67
Ligand effect on the cationic palladium complexes in polymerization of vinyl ethers, **656**, 199
Mechanism of the oxidative addition of Pd^0 complexes generated from $Pd^0(dba)_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, **643-644**, 416
5-Methylquinoxaline as a versatile mono-, bi- and tridentate ligand in Palladium(II) chemistry. Crystal structures of *trans*-$[Pd(OAc)_2(N1\text{-}C_8H_5N_2Me\text{-}5)_2]$ and $[Pd(OAc)(C,N4\text{-}CH_2C_8H_5N_2\text{-}5)(PPh_3)]$, **648**, 62
New studies on the apparent allyl rotation in scorpion-like palladium complexes. The influence of non-directly bonded groups. X-ray molecular structures of $[Pd(\eta^3\text{-}2\text{-}Me\text{-}C_3H_4)L]TfO$, L = bpzmArOMe and bpz*mCy, **650**, 210
Oxidative insertion into the N–H bond of carbazole, indole and pyrrole with zerovalent metals, **664**, 170
Palladium-catalyzed C–N and C–C cross-couplings as versatile, new avenues for modifications of purine 2′-deoxynucleosides, **653**, 234
Palladium-catalyzed cross-coupling reactions of arylboronic acids and 2-I-*p*-carborane, **657**, 267
Palladium cross-coupling reactions on solid support using a new silylated linker, **643-644**, 512
Palladium(II) induced preferential activation of the $\sigma(C_{sp3}–H)$ versus the $\sigma(C_{sp^2}$, ferrocene–H) bond of (S_C)-$[(\eta^5\text{-}C_5H_5)Fe\{(\eta^5\text{-}C_5H_4)–CH=N–CH(CO_2Me)CH_2–CH_2–SMe\}]$, **645**, 146
Preparation of 2-arylated-1,4-phenylenediamines by palladium-catalyzed cross-coupling reactions, **653**, 122
Structural and dynamic studies in solution of anionic dinuclear azolato-bridged palladium(II) complexes, **663**, 108
Synthesis and electrochemical behaviour of σ,η^2-acetylide-bridged early–late complexes;: The solid-state structure of $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ti(C{\equiv}CSiMe_3)_2]Pd(PPh_3)$, **664**, 123
Synthesis, characterisation and catalytic activity of Pd(II) and Ni(II) complexes with new cyclic α-diphenylphosphino-ketoimines. Crystal structure of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclopentylidene)aniline and of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclohexylidene)aniline, **662**, 150
Synthesis, characterization and catalytic activity in Heck-type reactions of orthometallated Pd^{II} and Pt^{II} complexes derived from (1*R*,2*R*)-1,2-diaminocyclohexane, **650**, 157
Synthesis, characterization and reactivity of palladium(II) compounds containing terdentate $[Csp^2, N, S]^-$ or $[Csp^3, N, S]^-$ ligands, **650**, 258
Synthesis of functionalized alkenes by transition metal-catalyzed carbostannylations of alkynes and dienes followed by cross-coupling reactions, **653**, 114

Palladium acetate
Catalytic oxidation of alcohols with allyl diethyl phosphate and palladium acetate, **650**, 151

Palladium and compounds
A historical note of the Stille reaction, **653**, 50
Multiple arylation of carbonyl compounds via palladium catalysis, **653**, 161

Palladium and platinum alkoxide complexes
Theoretical studies on the β-hydrogen elimination reactions of palladium and platinum alkoxide complexes containing bidentate ligands, **662**, 120

Palladium-boron cluster
Macropolyhedral boron-containing cluster chemistry: A novel triple-cluster structural motif. Isolation and characterisation of contiguous twenty-vertex $[(PPh_3)_4ClPd_4B_{16}H_{17}(PPh_3)_2]$, **657**, 262

Palladium–carbene complexes
Pd–benzothiazole carbene catalysed carbonylation of aryl halides in ionic liquids, **645**, 152

Palladium–carbon bond
The marked influence of steric and electronic properties of ancillary pyridylthioether ligands on the rate of allene insertion into the palladium–carbon bond, **650**, 43

Palladium catalysis
Efficient and stereoselective cross-coupling with highly substituted alkenylsilanols, **653**, 98
One-pot palladium-catalyzed phosphination of aryl iodides with Ph_2PSnR_3, **664**, 223
Stereoselective hydrostannation of substituted alkynes with trineophyltin hydride, **650**, 173

Palladium-catalysis
New cascade and multiple cross-coupling reactions for the efficient construction of complex molecules, **653**, 129

Palladium catalysis
A new frontier in the metal-catalyzed cross-coupling reaction field. The palladium-promoted metal–carbon bond formation. Scope and mechanism of a new tool in organometallic synthesis, **653**, 177
Palladium-catalyzed cross-coupling reaction of anilinium hypophosphite with alkenyl bromides and triflates: application to the synthesis of GABA analogs, **653**, 252

Palladium catalyst
Catalytic asymmetric cross-coupling, **653**, 41
Cyclopalladated complexes of tertiary arylamines as highly efficient catalysts using in the Heck reactions, **651**, 146
How I came across the silicon-based cross-coupling reaction, **653**, 58
Palladium-catalyzed cross-coupling reaction of organic halides with Grignard reagents, organolithium compounds and heteroatom nucleophiles, **653**, 27
Regio- and stereoselective addition of sterically hindered silylboranes to terminal alkynes, **646**, 179

Palladium catalysts
Cross-coupling reactions via organoboranes, **653**, 83

Palladium-catalyzed cross-coupling reaction
A convergent total synthesis of pumiliotoxins A and B via palladium-catalyzed cross-coupling reaction of homoallylic organozinc compounds with vinyl iodides, **653**, 229

Palladium-catalyzed cross-couplings
C–C Cross-coupling reactions for the combinatorial synthesis of novel organic materials, **653**, 200

Palladium complexes
Mono- and di-nuclear complexes of *ortho*-palladated and -platinated 4,4′-dimethylazobenzene with bis(diphenylphosphino)methane. More data on *transphobia*, **663**, 164
New amino-, imino- and oxazolinophosphites based on 1,1′-bi-2-naphtol: coordination and catalytic properties, **655**, 204
New complexes of palladium(II) with chelating heterocyclic nitrogen ligands. Characterization and catalytic activity in

CO–styrene copolymerization. Crystal structure of $[Pd(bipy)_2][BAr'_4]_2$, $Ar' = [3,5\text{-}(CF_3)_2C_6H_3]$, **664**, 77
Synthesis of Sb-chiral organoantimony compounds having intramolecular Sb···N interaction and their separation into optically pure compounds via *ortho*-palladated benzylamine complexes, **656**, 234
Palladium(II)
Cyclometallated compounds of Pd(II): C=N to C=O conversion through acid hydrolysis. Crystal and molecular structures of $[Pd\{4\text{-}(CHO)C_6H_3C(H)=NCy\}(Cl)(PPh_3)_2]$ and $[Pd\{2,4\text{-}(CHO)_2C_6H_3\}(Cl)(PPh_3)_2]$, **659**, 67
Intramolecular C–N bond formation in the reductive elimination of *ortho*-palladated arylhydrazones of acetophenone, **658**, 15
Oxidation of ketone by palladium(II). α-Hydroxyketone synthesis catalyzed by a bimetallic palladium(II) complex, **659**, 50
Oxidation of olefins by palladium(II). 18. Effect of reaction conditions, substrate structure and chiral ligand on the bimetallic palladium(II) catalyzed asymmetric chlorohydrin synthesis, **656**, 168
Pd(II) bromide complexes of 1,2-bis(diphenylphosphino)-1,2-dicarba-*closo*-dodecaborane. Crystal structures of $[PdBr_2(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CH_2Cl_2$, $[PdBr_{1.133}Cl_{0.867}(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CH_2Cl_2$ and $[PdBrCl_{0.541}Me_{0.459}(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CHCl_3$, **657**, 187
Polynuclear cyclometallated palladium(II) complexes. Crystal and molecular structures of $[(PPh_3)(Cl)PdN(Cy)=C(H)C_6H_2C(H)=N(Cy)\ Pd(Cl)(PPh_3)]$ and $[\{PdN(Cy)=C(H)C_6H_2C(H)=N(Cy)\text{-}Pd\}\{Ph_2PC(H)=C(H)PPh_2\text{-}P,P'\}_2][ClO_4]_2$, **655**, 127
Study of the *o*-carboranyl fragment as an uncommon substituent. Crystal structures of $[PdClMe(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CH_2Cl_2$ and $[PdClMe(1,2\text{-}(P^iPr_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]$, **645**, 39
Synthesis and evaluation of substituted pyrazoles palladium(II) complexes as ethylene polymerization catalysts, **660**, 108
Palladium(II) complexes
Cross-coupling reaction of organoboron compounds via base-assisted transmetalation to palladium(II) complexes, **653**, 54
Palladium-catalyzed formation of 3,5-diaryl-1,2,4-selenadiazoles from arylselenocarboxamide, **656**, 274
X-ray crystal structures of novel platinum(II) and palladium(II) complexes of dialkyl phosphonated phosphines, **649**, 113
Palladium(II) cyclopalladated compounds
C–Br versus C–H bond activation in palladium(II) cyclopalladated compounds. Crystal and molecular structure of $[Pd\{C_6H_4C(H)=NCy\}(MeCOCHCOMe)]$, **663**, 239
Palladium mirror
Cyclopalladated complexes of tertiary arylamines as highly efficient catalysts using in the Heck reactions, **651**, 146
Palladium–olefin complex
A novel mechanism for the fluxional behaviour of $[Pd(\eta^2\text{-}$tetramethylethylenetetracarboxylate)(2-methylthiomethylpyridine)], **642**, 58
Paracyclophanes
First siloxane tethered paracyclophane, **646**, 167
Regioselective palladation of 2-oxazolinyl-[2.2]paracyclophanes. Synthesis of planar-chiral phosphines, **662**, 23
Paramagnetic organometallics
Half-sandwich molybdenum(III) compounds containing diazadiene ligands and their use in the controlled radical polymerization of styrene, **663**, 269
Paramagnetic species
Phosphametallocenes: from discovery to applications, **646**, 15
Paramagnetism
Synthesis, characterization and electrochemistry of diruthenium complexes linked by aryl acetylide bridges, **660**, 1
Partition coefficients
Synthesis and characterization of fluoroalkyldistannoxanes, **648**, 246
Pauson–Khand reaction
Alkaloid *N*-oxide promoted asymmetric cobalt-mediated Pauson–Khand reaction, **642**, 131
Synthesis and cyclic voltammetry of 1,2,3-trisubstituted bis(cyclopentadienyl)zirconium dichlorides, **658**, 242
p-Biphenylene-bis(picoline)aldamine
Synthetic, spectral and structural aspects of some Rh(III) pentamethylcyclopentadiene complexes containing *N*,*N*′-donor bridging ligands, **658**, 43
p-Block elements
Heteroboranes of the p-block elements, **646**, 21
p-Carborane
Palladium-catalyzed cross-coupling reactions of arylboronic acids and 2-I-*p*-carborane, **657**, 267
P–C cleavage
CH and PC bond activations of PMe_2Ph ligands by an octahedral Ru_6 cluster, **651**, 124
P–C cross-coupling
One-pot palladium-catalyzed phosphination of aryl iodides with Ph_2PSnR_3, **664**, 223
PCP pincer complexes
Enantioselective synthesis of platinum group metal complexes with the chiral PCP pincer ligand $R,R\text{-}\{C_6H_4\text{-}2,6\text{-}(CH_2P^*PhBu^t)_2\}$. The crystal structure of $R,R\text{-}PdCl\{C_6H_3\text{-}2,6\text{-}(CH_2P^*PhBu^t)_2\}$, **654**, 44
Pd–allyl complexes
Reactivity of ammonium and iminium tetraphenylborates towards Pd(0)-complexes: selective allyl or proton transfer to Pd(0). Evidence of formation of the species $[HPd(dppe)_2][BPh_4]$, **662**, 112
Pd-catalyzed allylation
New amino-, imino- and oxazolinophosphites based on 1,1′-bi-2-naphtol: coordination and catalytic properties, **655**, 204
Pd-catalyzed cross-coupling
A genealogy of Pd-catalyzed cross-coupling, **653**, 34
Pd-catalyzed P–C and C–C coupling
Water soluble phosphines: Part XV. Syntheses of multiply functionalized and chiral phosphine ligands by Pd-catalyzed P–C and C–C coupling reactions, **645**, 14
Pd complexes
Complexation of *N*-heterocyclic silylenes to Pd(0): formation of highly labile homoleptic complexes $Pd[Si(^tBuNCH_2CH_2N^tBu)]_4$ and $Pd[Si(^tBuNCHCHN^tBu)]_3$, **649**, 141
Pd–Cu catalyst
Development of Pd–Cu catalyzed cross-coupling of terminal acetylenes with sp^2-carbon halides, **653**, 46
Pd–hydrido complexes
Reactivity of ammonium and iminium tetraphenylborates towards Pd(0)-complexes: selective allyl or proton transfer to Pd(0). Evidence of formation of the species $[HPd(dppe)_2][BPh_4]$, **662**, 112
$Pd(OAc)_2$
Highly selective synthesis of biphenyl by the $Pd(OAc)_2/HPA/O_2$/AcOH catalyst system, **664**, 59
Pd–Zn double metal catalysis
A genealogy of Pd-catalyzed cross-coupling, **653**, 34
Pentaarylcyclopentadienyliron dicarbonyl bromide complexes
Preparation and characterization of substituted pentaarylcyclopentadienyliron dicarbonyl bromide complexes containing methyl or fluorine substituents on the arene rings, **656**, 146
Pentacarbonyl complexes
Synthetic, structural and theoretical studies on the new 2,3-dihydro-1,2,4-thia-, selena- and tellura-diphospholes, $P_2EC_2\text{-}Bu^t_2(H)Me$, (E = S, Se, Te) and their $[M(CO)_5]$ complexes (M = Cr, Mo, W), **659**, 84

Pentacarbonyliron
A new method for calculating the CO-factored force constants of pentacarbonyliron, **658**, 176
Pentacoordiante silicate
How I came across the silicon-based cross-coupling reaction, **653**, 58
Pentacoordinate
Proton catalysis of nucleophilic substitution at pentacoordinate silicon, **655**, 1
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), **643-644**, 441
Pentacoordinated
Multinuclear NMR and X-ray diffraction study of pentacoordinated siloxane structures derived of pyridine diols, **648**, 280
Pentacoordinate silicon
Octakis[(2,2,6,6-tetramethylpiperidino)methyl]octasilsesquioxane: synthesis and crystal structure analysis of a new aminoorganyl-functionalized octasilsesquioxane, **646**, 200
Pentacoordinate silicon species
Synthesis and structure of the first pentacoordinate thiasiliranides, **643-644**, 504
Pentacoordinate thiasiliranide
Synthesis and structure of the first pentacoordinate thiasiliranides, **643-644**, 504
Pentacoordination
Synthesis and structural behavior of the P-functional organotin chlorides $[Ph_2P(CH_2)_3]_2SnCl_2$, $Ph_2P(CH_2)_3SnCl_2Me$, and $Ph_2P(CH_2)_nSnCl_3$ ($n = 2$, 3), **650**, 25
Pentafluorophenyl
Bis(pentafluorophenyl)mercury—a versatile synthon in organo-, organooxo-, and organoamido-lanthanoid chemistry, **647**, 50
Pentafluorophenyl complexes
Four- five- and six-co-ordinated pentafluorophenylthallium(III) complexes. Crystal structures of $[Tl(C_6F_5)_3(OPPh_3)]$, $[Tl(C_6F_5)_2Cl(OPPh_3)]_2$ and $[Tl(C_6F_5)_2(OdppmO)_2][Tl(C_6F_5)_2Cl_2]$, **663**, 289
Pentafluorophenyl derivatives
A luminescent Pt_3Pb cluster with three Pt(II) → Pb(II) bonds, **663**, 284
Pentamethylcyclopentadienyl
Carbon–fluorine bond activation of perfluorinated arenes with $Cp^*_2ZrH_2$, **658**, 132
Cyclic thioether and acyclic thioether–thiolate complexes of pentamethylcyclopentadienyl ruthenium(II, III), **664**, 161
β-SiH agostic bonding in sterically crowded lanthanidocene silylamide complexes, **647**, 236
Syndiotactic polystyrene with very high molecular weight produced by sterically and electronically modified catalyst, **655**, 186
The unusual reaction of $Ga(C_5Me_5)_3$ with a nucleophilic carbene, **643-644**, 487
Pentamethylcyclopentadienyl complex
Oxidation of primary and secondary alcohols catalyzed by a pentamethylcyclopentadienyliridium complex, **649**, 289
Pentavalent silicon
2-[(8-Dimethylaminonaphthalen-1-yl)dimethylsilyl]-*N*,*N*,4,4-tetramethyl-1,2,3,3*a*,4,5-hexahydro-4-sila-5,9*b*-ethenobenz[*e*]inde-9-amine. An unexpected by-product from the reaction of 1-lithio-8-dimethylaminonaphthalene with chlorodimethylvinylsilane, **654**, 3
Perfluorinated arenes
Carbon–fluorine bond activation of perfluorinated arenes with $Cp^*_2ZrH_2$, **658**, 132
Permethyltitanocene
Solid-state structures of persubstituted titanocene chlorides bridged with long aliphatic *ansa*-chains, **642**, 148
Peroxides
Oxidation of tetraaryldistibanes: syntheses and crystal structures of diarylantimony oxides and peroxides, $(R_2Sb)_2O$, $(R_2Sb)_4O_6$ and $(R_2SbO)_4(O_2)_2$ (R = Ph, *o*-Tol, *p*-Tol), **648**, 209
Transition metal-catalyzed oxidations of bishomoallylic alcohols, **661**, 67
Perrhenato complexes
Reactions of dirhenium heptoxide with manganese(I) and rhenium(I) hydrido, alkoxo, methylcarbonato, carbonato-bridged, and methoxymethyl complexes. The X-ray structures of *fac*-$(CO)_3$(dppp)$MnOReO_3$ and *fac*-$(CO)_3$(dppp)$ReOReO_3$, **658**, 88
Pharmaceutical
Application of cross-coupling reactions in Merck, **653**, 279
Phase-transfer catalyst
A novel and convenient synthesis towards 2-pyridylselenium compounds: X-ray crystal structure of 4,4′-dimethyl-2,2′-dipyridyl diselenide and tris(2-pyridylseleno)methane, **658**, 71
Phenanthroline
Synthesis, reactivity and structures of diethyldithiophosphate molybdenum complexes: crystal structures of $[Mo\{\eta^2\text{-}S_2P(OEt_2)\}_2(PhC{\equiv}CPh)_2]$ and $[Mo(\eta^3\text{-}C_3H_5)\{\eta^1\text{-}S_2P(OEt_2)\}(Phen)(CO)_2]$, **658**, 191
Phenanthroline unit
The synthesis and complexation of a cobaltocenium-based redox-active cryptand containing the phenanthroline unit, **648**, 8
Phenanthrolinyl ligands
Late transition metal complexes bearing 2,9-bis(imino)-1,10-phenanthrolinyl ligands: synthesis, characterization and their ethylene activity, **658**, 62
Phenolato ligands
Dialkyl titanium complexes that contain a sulfur-linked bis(phenolato) ligand: The structure of an olefin polymerization catalyst precursor, **663**, 158
Phenoxide
A tetrameric copper(I) alkoxide with a π-tethered ligand: 2-allyl-6-methylphenoxocopper(I), **649**, 204
Phenylantimony(III) compounds
Phenylantimony(III) derivatives of tetraphenyldichalcogenoimidodiphosphinic acids. Crystal and molecular structure of $PhSb[(XPPh_2)(SPPh_2)N]_2$ (X = O, S), **642**, 113
Phosphaalkenyl
Reactions of bulky alkyl lithium reagents with a phosphaalkyne ($P{\equiv}CBu^t$): synthesis and structural characterisation of a mixed valent phosphorus cage compound, $P^{III}\{\mu\text{-}C(H)(Bu^t)\}_2\{\mu\text{-}C(H)(SiMe_3)Si(Me)_2C(H)_2\}P^V{=}C(SiMe_3)_2$, and a phosphaalkenyl-substituted η^3-azaallyl-lithium complex, $[Li(tmeda)\{C(SiMe_3)(2\text{-}NC_5H_3Me\text{-}6)[P{=}C(Bu^t)(SiMe_3)]\}]$, **645**, 256
Phosphaalkyne
Chemistry and ligating properties of the 1,2,4-thiadiphosphole $P_2SC_2Bu^t_2$, **655**, 7
Reactions of bulky alkyl lithium reagents with a phosphaalkyne ($P{\equiv}CBu^t$): synthesis and structural characterisation of a mixed valent phosphorus cage compound, $P^{III}\{\mu\text{-}C(H)(Bu^t)\}_2\{\mu\text{-}C(H)(SiMe_3)Si(Me)_2C(H)_2\}P^V{=}C(SiMe_3)_2$, and a phosphaalkenyl-substituted η^3-azaallyl-lithium complex, $[Li(tmeda)\{C(SiMe_3)(2\text{-}NC_5H_3Me\text{-}6)[P{=}C(Bu^t)(SiMe_3)]\}]$, **645**, 256
Phosphaalkynes
Organophosphorus compounds Part 164. 2,4-Disubstituted 1,3-diphosphacyclobutadienes: generation and trapping reactions, **643-644**, 409
Synthesis of alkaline earth metal bis(2-phosphaethynolates), **643-644**, 189
Phosphaallene
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, **643-644**, 342
Phosphaboranes
Recent developments in the chemistry of the nine-vertex monocarbaboranes, **657**, 3

Phosphacarboranes
Recent developments in the chemistry of the nine-vertex monocarbaboranes, **657**, 3
Phosphametallocene
Phosphametallocenes: from discovery to applications, **646**, 15
Phosphane
Reactions of methyl(phenyl)silylene with CO and PH_3—the formation of acid–base complexes, **641**, 156
Phosphane complexes
Coordinated olefins, $H_2C{=}CHR$, and phosphanes, PH_2R: a theoretical study of the R substituent effect, **643-644**, 285
Phosphanes
η^1-Alkynylplatinum(II) complexes with cycloocta-1,5-diene and tri(1-cyclohepta-2,4,6-trienyl)phosphane ligands, **641**, 173
Strain in organometallics: synthesis of rhodium and iridium complexes with a novel rigid tetrachelating phosphine olefin ligand and their redox properties, **641**, 227
Phosphanide
Synthesis of heavier alkali metal phospholides. Crystal structure of caesium 2,3,4,5-tetramethylphospholide, an ionic solid, **642**, 208
Phosphate
Imido analogs of aluminophosphates: syntheses and X-ray structures of $\{LiAl[OP(N^tBu)_2(NH^tBu)]_2\}_2$ and the mono- and di-methylaluminum complexes of the anions $[OP(N^tBu)_x(NH^tBu)_{3-x}]^{x-}$ ($x = 1$, 2), **646**, 107
Phosphides
σ-Metathesis reaction and E–H activation (E = P, As) of diphosphanyl- and diarsanylsilanes in the presence of the metal complex fragments [(dppe)M] (M = Ni, Pd, Pt; dppe = 1,2-$(Ph_2P)_2C_2H_4$), **643-644**, 468
Phosphido
Phosphorus–hydrogen bond cleavage on a Ph_2PH-substituted μ_3-thioxo dicobalt–iron cluster as a route to bridging phosphido and thiophosphine ligands, **642**, 228
Phosphine
Cationic ruthenium(II) complexes containing a chelating $\eta^1{:}\eta^6$-phosphinoarene ligand; $[RuCl(L)(PPh_2(CH_2)_3\text{-}\eta^6\text{-}C_6H_5)][PF_6]$ (L = $P(OPh)_3$, $P(OMe)_3$, PPh_3, PMe_3, NCMe, NC_5H_5), **659**, 1
Isolation and structural characterization of some stable Pd(II) carboxylate complexes supported by 1,1′-bis(diphenylphosphino) ferrocene (dppf), **658**, 159
Ligand effect on the cationic palladium complexes in polymerization of vinyl ethers, **656**, 199
Mixed-metal cluster chemistry: Part 20. Syntheses, crystal structures and electrochemical studies of $W_2Ir_2(\mu\text{-}L)(CO)_8(\eta^5\text{-}C_5H_4Me)_2$ (L = dppe, dppf), **650**, 133
Phosphine substituted $Ru_3(\mu\text{-dppm})(CO)_{10}$: structural trends within $[Ru_3(\mu\text{-dppm})(PR_3)(CO)_9]$ (R = Et, Ph, Cy and Pr^i), **655**, 227
Synthesis and reactions of the cationic seven-coordinate complexes, $[MoI(CO)_3(NCR)\{Ph_2P(CH_2)_nPPh_2\}][BF_4]$ (R = Me, $n = 1$, 2 and 3; R = Et, $n = 1$). Crystal structures of $[MoI_2(CO)_2(PPh_3)\{Ph_2P(CH_2)PPh_2\}]$, $[MoI(CO)_2\{Ph_2P(CH_2)PPh_2\}_2][BF_4]\cdot CH_2Cl_2$, $[MoCl_3O\{Ph_2PO(CH_2)OPPh_2\}]$ and $[Mo_3(\mu_3\text{-}I)_2\{\mu_2\text{-}Ph_2P(CH_2)PPh_2\}_3]I$, **664**, 45
Phosphine–borane complexes
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, **643-644**, 237
Phosphine ligands
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile, isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, **643-644**, 214
New benzotriazole derivatives as multifunctional ligands, **658**, 251
Phosphine ligand synthesis
Water soluble phosphines: Part XV. Syntheses of multiply functionalized and chiral phosphine ligands by Pd-catalyzed P–C and C–C coupling reactions, **645**, 14
Phosphine oxide
Four- five- and six-co-ordinated pentafluorophenylthallium(III) complexes. Crystal structures of $[Tl(C_6F_5)_3(OPPh_3)]$, $[Tl(C_6F_5)_2Cl(OPPh_3)]_2$ and $[Tl(C_6F_5)_2(OdppmO)_2][Tl(C_6F_5)_2Cl_2]$, **663**, 289
Polyether phosphine oxide induced phase separable homogeneous catalysis for hydroformylation of higher olefins, **664**, 1
Phosphine pendant cyclopentadienyl ligand
Synthesis of Group 4 transition-metal complexes bearing a secondary phosphine pendant cyclopentadienyl ligand, **648**, 231
Phosphines
Polynuclear cyclometallated palladium(II) complexes. Crystal and molecular structures of $[(PPh_3)(Cl)PdN(Cy){=}C(H)C_6H_2C(H){=}N(Cy)\ Pd(Cl)(PPh_3)]$ and $[\{PdN(Cy){=}C(H)C_6H_2C(H){=}N(Cy)\text{-}Pd\}\{Ph_2PC(H){=}C(H)PPh_2\text{-}P,P\}_2][ClO_4]_2$, **655**, 127
Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)tetrathiafulvalenes, **643-644**, 292
Synthesis and characterisation of derivatives of $[HIr_4(CO)_{10}(\mu\text{-}PPh_2)]$ with mono and diphosphines; X-ray molecular structures of $[HIr_4(CO)_8(PPh_3)_2(\mu\text{-}PPh_2)]$ and $[HIr_4(CO)_8\{Ph_2P\text{-}(CH_2)_nPPh_2\}(\mu\text{-}PPh_2)]$ ($n = 1$ and 4), **656**, 188
Synthesis and reactivity of P-acetylenic (silylamino)phosphines, **646**, 223
Synthesis of dendrimers with phosphine end groups at each generation, **643-644**, 112
The reactivity of new (1,5-cyclooctadiene)rhodium acylpyrazolonates towards N- and P-donor ligands: X-ray structures of [Rh(1,5-COD)Q^s], [Rh(1,5-COD)(phen)]$Q^s\cdot 0.5H_2O$ (HQ^s = 1-phenyl-3-methyl-4-(2-thenoyl)-pyrazol-5-one) and $[Rh(1,5\text{-}COD)Br]_2$, **651**, 5
Phosphinic acid
A novel and convenient preparation of hypophosphite esters, **643-644**, 154
Enantioselective synthesis of phosphinyl peptidomimetics via an asymmetric Michael reaction of phosphinic acids with acrylate derivatives, **646**, 212
Palladium-catalyzed cross-coupling reaction of anilinium hypophosphite with alkenyl bromides and triflates: application to the synthesis of GABA analogs, **653**, 252
Phosphinidene
A role for free phosphinidenes in the reaction of magnesium and sterically encumbered $ArPCl_2$ in solution at room temperature, **646**, 255
Phosphinidene complexes
Donor–acceptor interactions with electrophilic terminal phosphinidene complexes, **643-644**, 223
Phosphinidenes
Reactivity of electrophilic terminal phosphinidene complexes toward phosphorus ylides, **650**, 57
Phosphinimine
Lithium phosphonium azayldiides $R_3P{=}NLi$. Applications in organic synthesis and coordination chemistry, **646**, 94
Phosphinoalkyne
Palladium(II) ion promoted hydroamination of di(phenylethynyl)phenylphosphine and aniline: a facile synthesis of a six-membered P–N heterocycle, **643-644**, 4
Phosphino ketoimines
Synthesis, characterisation and catalytic activity of Pd(II) and Ni(II) complexes with new cyclic α-diphenylphosphino-ketoimines. Crystal structure of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclopentylidene)aniline and of 2,6-diisopropyl-*N*-(2-diphenylphosphino-cyclohexylidene)aniline, **662**, 150
Phosphinopeptides
Preparation of phosphinodipeptide analogs as building blocks for pseudopeptides synthesis, **643-644**, 381

Phosphinyl peptidomimetics
Enantioselective synthesis of phosphinyl peptidomimetics via an asymmetric Michael reaction of phosphinic acids with acrylate derivatives, **646**, 212
Phosphite
Nitrile exchange reactions of $[WI(CO)(NCMe)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$; X-ray crystal structures of $[WI(CO)(L)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$ $\{L = NC^iPr, NC^tBu, NCCH_2Ph, 1,2\text{-}C_6H_4(NCCH_2)_2\}$, **664**, 37
Polyether phosphite for hydroformylation of higher olefins in non-aqueous system and catalyst recovery, **654**, 83
Preparation of dinitrogen complexes $Mo(N_2)_2P_4$ stabilised by phosphonite $PPh(OEt)_2$ and phosphinite $PPh_2(OEt)$ ligands, **660**, 55
Phosphites
Hydroxyferrocene as a prochiral analog of phenols: cyclopalladation of a mixed phosphite ester of hydroxyferrocene, **642**, 236
New amino-, imino- and oxazolinophosphites based on 1,1′-bi-2-naphtol: coordination and catalytic properties, **655**, 204
The phosphorofluoroamidite approach to mixed phosphites, **643-644**, 490
Phosphole
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, **643-644**, 494
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, **643-644**, 19
Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, **643-644**, 136
Mechanism of the oxidative addition of Pd^0 complexes generated from $Pd^0(dba)_2$ and a phosphole ligand DBP: a special case where dba does not play any inhibiting role, **643-644**, 416
Synthesis of heavier alkali metal phospholides. Crystal structure of caesium 2,3,4,5-tetramethylphospholide, an ionic solid, **642**, 208
Synthesis of mixed phospholyl/cyclooctatetraenyl–lanthanide complexes. Crystal and molecular structure of (cyclooctatetraenyl)[3,4-dimethyl-2,5-bis(trimethylsilyl)-phospholyl](tetrahydrofuran)neodymium, **647**, 139
Phosphole oligomers
Structure–property relationships in phosphole oligomers: a theoretical insight, **643-644**, 194
Phospholes
A study of the coordination ability of 2,5-di(2-pyridyl)phospholes on Ru centres, **663**, 118
Phospholyl
The first mixed cyclooctatetraenyl-phospholyl metal complexes. Crystal structure of $[U(\eta\text{-}C_8H_8)(\eta\text{-}C_4Me_4P)(BH_4)(OC_4H_8)]$, **643-644**, 209
Phosphonates
A practical access to α-phosphonoenamides, **643-644**, 404
Phosphoniophosphines
'Diopium', a chiral phosphoniophosphine derived from Kagan's diop. Rhodium complexes and reducing catalytic properties, **654**, 180
Phosphonium
Lithium phosphonium azayldiides $R_3P{=}NLi$. Applications in organic synthesis and coordination chemistry, **646**, 94
Phosphoranimines
Synthesis and reactivity of P-acetylenic (silylamino)phosphines, **646**, 223
Phosphorus
A new approach to photophysical properties control of main group element π-electron compounds based on the coordination number change, **652**, 3
A role for free phosphinidenes in the reaction of magnesium and sterically encumbered $ArPCl_2$ in solution at room temperature, **646**, 255
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, **643-644**, 253
Functionalized cobalt bis(dicarbollide) ions as selective extraction reagents for removal of M^{2+} and M^{3+} cations from nuclear waste, crystal and molecular structures of the $[8,8'\text{-}\mu\text{-}ClP(O)(O)_2{<}(1,2\text{-}C_2B_9H_{10})_2\text{-}3,3'\text{-}Co]HN(C_2H_5)_3$ and $[8,8'\text{-}\mu\text{-}Et_2NP(O)(O)_2{<}(1,2\text{-}C_2B_9H_{10})_2\text{-}3,3'\text{-}Co](HN(CH_3)_3)$, **657**, 59
Reactivity of *cyclo*-$(PhX)_6$ (X = As, P) towards $[M_3L_2(CO)_{10}]$ (M = Ru, L = CO or NCMe; M = Fe, L = CO), **664**, 27
The coordination number–photophysical properties relationship of trianthrylphosphorus compounds: doubly locked fluorescence of anthryl groups, **646**, 277
Phosphorus heterocycles
A zwitterionic phosphanyl-substituted phosphonio-benzo[*c*]phospholide as bridging ligand towards dinuclear transition metal carbonyls, **643-644**, 181
Metalated 1,3-azaphospholes: synthesis of lithium-1,3-benzazaphospholides and reactivity towards organoelement and organometal halides, **646**, 113
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, **643-644**, 68
Synthesis of 2H-1,2-oxaphosphorin 2-oxides, **646**, 153
Phosphorus(III) triflates
Electronic effects on the acidity of phosphorus(III) triflates, **643-644**, 516
Phosphorus ligands
Cyclopalladated compounds with a bidentate [C, N]/terdentate [C, N, S] benzylidenethiophene imine ligand. Crystal and molecular structures of $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H){=}NCH_2(C_4H_3S)\}(\mu\text{-}OAc)]_2$, $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H){=}NCH_2(C_4H_3S)\}\text{-}(Cl)\cdot(PPh_3)]$ and $[\{Pd[2,3\text{-}(MeO)_2C_6H_2C(H){=}NCH_2(C_4H_3S)](Cl)\}_2(\mu\text{-}Ph_2P(CH_2)_4PPh_2)]$, **654**, 162
Facile syntheses of new multidentate (phosphino)amines: X-ray structure of $1,4\text{-}\{(OC)_4Mo(Ph_2P)_2NCH_2\}_2C_6H_4$, **664**, 294
Osmacycles containing the $\{(Ph_2PE)_2N\}^-$ ligand (E = S or Se): synthesis and crystal structures, **664**, 85
Phosphorus ylides
Phosphorus stabilized carbenes: theoretical predictions, **643-644**, 278
Reaction of ketenylidenetriphenylphosphorane, $Ph_3PC{=}C{=}O$, with water: formation of methyltriphenylphosphonium hydrogencarbonate, **642**, 64
Reactivity of electrophilic terminal phosphinidene complexes toward phosphorus ylides, **650**, 57
Phosphorylated tyrosine
Photo-Arbuzov rearrangements of cyclic phosphite systems, **646**, 239
Phosphorylation
Site-selective phosphorylation of arylphospholes through reaction with phosphorus tribromide, **643-644**, 32
Photo-Arbuzov
Photo-Arbuzov rearrangements of cyclic phosphite systems, **646**, 239
Photochemistry
A theoretical study of the reaction products created by irradiation of the carbonyl iron silyl complexes $Cp(CO)_2FeSiH_2Me$ and $Cp(CO)_2FeCH_2SiH_3$, **648**, 155
Metal–coumarin complexes: synthesis and characterization of 7-isocyanocoumarin ligands and $Mo(CO)_4(7\text{-isocyanocoumarin})_2$ complexes. X-ray crystal structure of $Mo(CO)_4(7\text{-isocyano-4-trifluoromethylcoumarin})_2$, **642**, 97
The quest for triplet ground state silylenes, **646**, 68
Photocycloaddition
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, **643-644**, 324

Photodissociation
Time-resolved organometallic photochemistry: Femtosecond fragmentation and adaptive control of $CpFe(CO)_2X$ (X = Cl, Br, I), **661**, 199
Photoelectron spectroscopy
Time-resolved photoelectron spectroscopy: A unique tool to monitor the vibrational and fragmentation dynamics of metal carbonyls, **661**, 191
Photolysis
Photochemical intermediates of *trans*-$Rh(CO)L_2Cl$ where L = PMe_3, PBu_3, and *i*-Pr_2HN and *cis*-$Rh(CO)_2$(*i*-Pr_2HN)Cl in frozen organic glasses, **652**, 95
Photosubstitution
Photosubstitution of the halide ligands (X^-) in (η^5-C_5H_5)$Fe(CO)(PPh_3)X$, **648**, 293
Physicochemical and electrochemical properties
Synthesis, physicochemical and electrochemical properties of metal–metal bonded ruthenium corrole homodimers, **652**, 69
pi-Conjugated polymer
Cross-coupling reactions for preparation of π-conjugated polymers, **653**, 195
Planar chiral
Planar chiral (η^6-arene)tricarbonylchromium complexes derived from mandelic acid, **654**, 140
Planar chirality
Hydroxyferrocene as a prochiral analog of phenols: cyclopalladation of a mixed phosphite ester of hydroxyferrocene, **642**, 236
Regioselective palladation of 2-oxazolinyl-[2.2]paracyclophanes. Synthesis of planar-chiral phosphines, **662**, 23
Synthesis and characterization of planarly chiral nonbridged bis(1-*R*-indenyl) zirconium dichloride complexes and X-ray structure of *rac*-[(η^5-C_9H_6-1-$C(CH_3)_2$-*o*-C_6H_4–OCH_3)$_2ZrCl_2$]·THF, **650**, 114
Platinum
η^1-Alkynylplatinum(II) complexes with cycloocta-1,5-diene and tri(1-cyclohepta-2,4,6-trienyl)phosphane ligands, **641**, 173
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Coordinated olefins, H_2C=CHR, and phosphanes, PH_2R: a theoretical study of the R substituent effect, **643-644**, 285
1-Diisopropylaminophospholes: synthesis and X-ray characterisations of new palladium and platinum complexes, **643-644**, 19
New half-sandwich heterobimetallic CpMPt (M = Rh, Ir) dithiolato bridged complexes. X-ray structure of [$(PPh_3)_2Pt$(μ-$S(CH_2)_2S$)$RhCl(\eta^5$-$C_5H_5)$]BF_4, **662**, 188
Oxidative insertion into the N–H bond of carbazole, indole and pyrrole with zerovalent metals, **664**, 170
Platinum- and nickel-catalyzed reactions of 1,2-dimethyl-1,2-diphenyl-1,2-disilacyclopentane with alkynes, **645**, 47
Regioselective activation of C–H bonds of naphthyl imines at platinum(II). Crystal structures of [PtMe{1-(2′-$ClC_6H_4CH_2N$=CH)$C_{10}H_6$}PPh_3] and [PtMe{2-(2′-$ClC_6H_4CH_2N$=CH)$C_{10}H_6$}PPh_3], **642**, 171
Syntheses and structures of monoplatinum model complexes for diplatinum polyynediyl adducts $L_nPt(C{\equiv}C)_2PtL_n$, **641**, 53
Synthesis and characterisation of new platinum ethynyl dimers and polymers with pendant ferrocenyl groups, **649**, 94
Synthesis and complexation of a new facultative tridentate S_2Te donor ligand $MeS(CH_2)_3Te(CH_2)_3SMe$: crystal structures of [$Rh(Cp^*)(S_2Te)$][PF_6]$_2$ and [$PtCl(S_2Te)$]PF_6, **649**, 214
Synthesis, characterization and catalytic activity in Heck-type reactions of orthometallated Pd^{II} and Pt^{II} complexes derived from (1*R*,2*R*)-1,2-diaminocyclohexane, **650**, 157
Synthesis, characterization and structural studies of new heterometallic alkynyl complexes of platinum and Group 11 metals with chelating bis(diphenylphosphino)ferrocene ligand, **659**, 107
Transformations of organosilanes by Pt(II) complexes with hemilabile P,N-chelating ligands, **646**, 53
Platinum complexes
A luminescent Pt_3Pb cluster with three Pt(II) → Pb(II) bonds, **663**, 284
Catalytic transformations of diazo compounds promoted by platinum(0) and dicationic platinum(II) complexes, **642**, 32
Ferrocenyl hydroxymethylphosphines (η^5-C_5H_5)Fe[η^5-$C_5H_4P(CH_2OH)_2$] and 1,1′-[Fe{η^5-$C_5H_4P(CH_2OH)_2$}$_2$] and their chalcogenide derivatives, **658**, 181
Mono- and di-nuclear complexes of *ortho*-palladated and -platinated 4,4′-dimethylazobenzene with bis(diphenylphosphino)methane. More data on *transphobia*, **663**, 164
Reactions of organotin(IV) compounds with platinum complexes. Part(III). Reactions of $(R_2Sn)_n$, (R = Me or Ph, *n* = 6; R = Et, *n* = 9) with platinum complexes, **654**, 21
Reactions of [$(PPh_3)_2Pt(\eta^3$-$CH_2CCPh)]^+$ with oxygen nucleophiles and chemistry of resultant [$(PPh_3)_2Pt(\eta^3$-$CH_2C(OR)CHPh)]^+$ complexes, **655**, 192
Platinum compounds
Dimethylplatinum(II) and tetramethylplatinum(IV) complexes of 1-methyl-(2-alkylthiomethyl)-1*H*-benzimidazoles: experimental and DFT-calculated structures and NMR spectra, **655**, 218
Platinum group catalysis
Iminophosphines: synthesis, formation of 2,3-dihydro-1*H*-benzo[1,3]azaphosphol-3-ium salts and *N*-(pyridin-2-yl)-2-diphenylphosphinoylaniline, coordination chemistry and applications in platinum group catalyzed Suzuki coupling reactions and hydrosilylations, **650**, 231
Platinum(II) biscarbene complexes
Synthesis and structural characterization of novel bridged platinum(II) biscarbene complexes, **660**, 121
Platinum(II) complexes
X-ray crystal structures of novel platinum(II) and palladium(II) complexes of dialkyl phosphonated phosphines, **649**, 113
Platinum(IV)
Angular (*cis*-stilbazole) geometry in octahedral dimethyldihalidoplatinum(IV) complexes: potential as metallomesogens and X-ray structure of [$PtMe_2I_2(NC_5H_4CH$=$CHC_6H_4OC_7H_{15})_2$], **645**, 206
P ligands
Phosphane- and phosphorane *Janus Head* ligands in metal coordination, **661**, 111
P-ligands
Isolation and structural characterisation of two sterically crowded diphosphanes, **656**, 43
Plumbocene
A new, tetragonal, helical phase of plumbocene, Cp_2Pb; variations on a molecular string (Cp = C_5H_5), **650**, 75
PM3(tm) calculations
Catalytic reduction of acetophenone with transition metal systems containing chiral bis(oxazolines), **659**, 186
P,*N*-ligands
New amino-, imino- and oxazolinophosphites based on 1,1′-bi-2-naphtol: coordination and catalytic properties, **655**, 204
^{31}P-NMR
Study of the *o*-carboranyl fragment as an uncommon substituent. Crystal structures of [PdClMe(1,2-$(PPh_2)_2$-1,2-$C_2B_{10}H_{10}$)]·CH_2Cl_2 and [PdClMe(1,2-$(P^iPr_2)_2$-1,2-$C_2B_{10}H_{10}$)], **645**, 39
The reactivity of new (1,5-cyclooctadiene)rhodium acylpyrazolonates towards N- and P-donor ligands: X-ray structures of [Rh(1,5-COD)Q^s], [Rh(1,5-COD)(phen)]Q^s·0.5H_2O (HQ^s = 1-phenyl-3-methyl-4-(2-thenoyl)-pyrazol-5-one) and [Rh(1,5-COD)Br]$_2$, **651**, 5
^{31}P-NMR studies
Reactions of organotin(IV) compounds with platinum complexes.

Part(III). Reactions of $(R_2Sn)_n$, (R = Me or Ph, $n = 6$; R = Et, $n = 9$) with platinum complexes, **654**, 21
^{31}P-NMR study
Synthesis of P-chiral enephosphonic acid derivatives, **662**, 83
P/O- and P/S-donor ligands
A comparison of the ligating properties of the mixed P/O- and P/S-donor ligands $Ph_2P(CH_2)_2O(CH_2)_2O(CH_2)_2PPh_2$ and $Ph_2P(CH_2)_2S(CH_2)_2S(CH_2)_2PPh_2$ with Group 6 and 7 carbonyls, **655**, 55
Polarized phosphaalkene
Substituent effects in polarized phosphaalkenes: a theoretical study of aminocarbene–phosphinidene adducts, **643-644**, 105
Polyalkynes
Preparation, characterization, and reactivities of thienyl nickel complexes bearing indenyl ligands, **660**, 98
Polyamide
New N- and O-donor ligand environments in organoscandium chemistry, **647**, 145
Polyamines
Hemilability of the primary amine–metal bond in polyamine-(Group 6) metal carbonyl complexes, **664**, 214
Poly(aminoborane)
High resolution solid state NMR investigation of various boron nitride preceramic polymers, **657**, 75
Poly(aryleneethynylene)
A new frontier in the metal-catalyzed cross-coupling reaction field. The palladium-promoted metal–carbon bond formation. Scope and mechanism of a new tool in organometallic synthesis, **653**, 177
Polyazine ligands
Stable mononuclear and binuclear ruthenium(II) arene complexes with multiple N-donor poly-pyridyl ligands: synthesis, spectroscopic and structural characterization. Single crystal X-ray structure of $[(\eta^6\text{-}C_{10}H_{14})RuCl(bppz)]BF_4$, **642**, 48
Polyborazilene
High resolution solid state NMR investigation of various boron nitride preceramic polymers, **657**, 75
Polycyclic aromatics
Exploiting the versatility of organometallic cross-coupling reactions for entry into extended aromatic systems, **653**, 215
Polydentate amido ligands
Transition metal complexes with polydentate amido ligands: novel structural building blocks and chemical reagents, **661**, 85
Polydentate Schiff base
Intramolecular coordination of Ln–O and Ln–N bonds in some new substituted lanthanocene complexes, **647**, 100
Polyethylene
The formation and polymerization behavior of Ni(II) α-diimine complexes using various aluminum activators, **645**, 158
Polyfunctional organometallics
Preparation of 2-arylated-1,4-phenylenediamines by palladium-catalyzed cross-coupling reactions, **653**, 122
Polyhedral
A structural isomer of the $[CoFe_3(CO)_{13}]^-$ anion, **645**, 281
Poly(lactone)
Synthesis and crystal structure of one carbon-atom bridged lutetium complex $[Ph_2C(Flu)(Cp)]LuN(TMS)_2$ and catalytic activity for polymerization of polar monomers, **645**, 82
PolyMAB
Pyrolysis of poly[2,4,6-tri(methylamino)borazine] and its conversion into BN fibers, **657**, 91
Polymer
Synthesis and characterisation of new platinum ethynyl dimers and polymers with pendant ferrocenyl groups, **649**, 94
Polymercuramacrocycles
Coordination chemistry of polymercuramacrocycles. Complexation of cyclic trimeric perfluoro-*o*-phenylenemercury with neutral oxygeneous Lewis bases, **654**, 123
Polymeric superstructures
Crystal and molecular structure of (α-naphthyl)TeI_3, **664**, 306
Polymer immobilized metallocene
Polymer immobilized silane bridged metallocene catalysts for ethylene polymerization, **655**, 167
Polymerisation
Allenylidene-ruthenium-arene precatalyst for ring opening metathesis polymerisation (ROMP), **663**, 235
Non-hindered ansasamarocenes, versatile catalysts for diene/olefin/polar monomer copolymerisations. What is really the active species?, **647**, 167
Polymerization
Bis(trifluoromethane)sulfonimide initiated ring-opening polymerization of octamethylcyclotetrasiloxane, **646**, 171
Bis(trifluoromethane)sulfonimide initiated ring-opening polymerization of octamethylcyclotetrasiloxane, **646**, 171
Hydrosilylation reactions of tetramethyldisilazanes and their derivatives, **655**, 115
Lanthanide(II) complexes bearing mixed linked and unlinked cyclopentadienyl–monodentate-anionic ligands, **647**, 61
Ligand effect on the cationic palladium complexes in polymerization of vinyl ethers, **656**, 199
Organo-rare-earth-metal initiated living polymerizations of polar and nonpolar monomers, **647**, 128
Synthesis and reactivity of organolanthanoid complexes containing N and S ligands, **647**, 180
Synthesis, characterization and application of organolanthanide complexes $(CH_2{=}CHCH_2CH_2C_5H_4)_2Ln{-}Cl{\cdot}2THF$ (Ln = Sm, Y, Dy, Er) as methyl methacrylate (MMA) polymerization catalysts, **647**, 105
Synthesis, characterization of homoleptic lanthanide amidinate complexes and their catalytic activity for the ring-opening polymerization of ε-caprolactone, **662**, 144
Synthesis, molecular structure, and polymerization reactivity of ethylenebis(1,3-dimethylcyclopentadienyl)zirconium dichloride, **660**, 161
Synthesis of zirconocene amides and ketimides and an investigation into their ethylene polymerization activity, **656**, 63
Synthesis, structure and polymerization catalytic properties of doubly bridged bis(cyclopentadienyl) dinuclear titanium and zirconium complexes, **645**, 212
Synthesis, structures and polymerization catalytic properties of germyl-bridged bis(cyclopentadienyl) metallocenes, **645**, 262
Transition metal mediated routes to poly(arylphosphine)s: investigation of novel phosphorus containing conjugated polymers, **653**, 167
Zirconium bis-indenyl compounds. The influence of substituents on the ethene polymerization behavior of 1- and 2-substituted $(R\text{-}Ind)_2ZrCl_2$/MAO catalysts, **642**, 195
Zirconocene compounds derived from boratastilbene, 4-boratastyrylstilbene, and 1,4-bis(boratastyryl)benzene and their reactivities to the ethylene polymerization, **642**, 275
Polymerization catalysts
Dialkyl titanium complexes that contain a sulfur-linked bis(phenolato) ligand: The structure of an olefin polymerization catalyst precursor, **663**, 158
New bis(imino)pyridine-iron(II)- and cobalt(II)-based catalysts: synthesis, characterization and activity towards polymerization of ethylene, **648**, 55
Polymer mass distribution
Mass spectrometry of polystyrene and polypropene ruthenium complexes. A new tool for polymer characterization, **663**, 213
Polymer–mineral transition
Pyrolysis of poly[2,4,6-tri(methylamino)borazine] and its conversion into BN fibers, **657**, 91

Polymer modification
Mass spectrometry of polystyrene and polypropene ruthenium complexes. A new tool for polymer characterization, **663**, 213
Poly(metallaaryleneethynylene)
A new frontier in the metal-catalyzed cross-coupling reaction field. The palladium-promoted metal–carbon bond formation. Scope and mechanism of a new tool in organometallic synthesis, **653**, 177
Poly(MMA)
Synthesis and crystal structure of one carbon-atom bridged lutetium complex $[Ph_2C(Flu)(Cp)]LuN(TMS)_2$ and catalytic activity for polymerization of polar monomers, **645**, 82
Polyphosphines
Transition metal mediated routes to poly(arylphosphine)s: investigation of novel phosphorus containing conjugated polymers, **653**, 167
Polypropylene
The formation and polymerization behavior of Ni(II) α-diimine complexes using various aluminum activators, **645**, 158
Poly-pyridyl ligands
Synthetic, spectral and structural aspects of some mono- and binuclear (homo/hetero) Ru(II) hydrido carbonyl complexes, **648**, 39
Polypyrrole
Cobaltabisdicarbollide anion $[Co(C_2B_9H_{11})_2]^-$ as doping agent on intelligent membranes for ion capture, **657**, 239
Polysilanes
Cobalt(II) and iron(II) tris(trimethylsilyl)siloxides: synthesis, structure and reactivity, **642**, 20
Polysiloxanes
Polycondensation and disproportionation of an oligosiloxanol in the presence of a superbase, **660**, 14
Polysilylcarbodiimides
Dehydrocoupling of tris(hydridosilylethyl)boranes and cyanamide: a novel access to boron-containing polysilylcarbodiimides, **659**, 29
Poly(tetramethylsilethylenesiloxane)
Silane-induced ring-opening polymerization of 1,1,3,3-tetramethyl-2-oxa-1,3-disilacyclopentane catalyzed by a triruthenium cluster, **660**, 145
Poly(triazol-1-yl)alkane
Synthesis and reactivity of Group 6 metal carbonyl complexes containing bis(triazol-1-yl)methane: linkage coordination polymers, **642**, 179
Potassium
Sodium and potassium derivatives of diphenyl(trimethylsilyl)methane, **664**, 182
Synthesis and structures of crystalline bis(trimethylsilyl)methanido complexes of potassium, calcium and ytterbium, **663**, 263
The bent metallocene geometries of potassium polyalkyl cyclopentadienyl THF solvates: monosolvated $[(THF)K(\mu\text{-}C_5Me_5)]_n$, disolvated $[(THF)_2K(\mu\text{-}C_5Me_5)]_n$ and the tethered olefin complex $[(THF)K(\mu\text{-}C_5Me_4SiMe_2CH_2CH{=}CH_2)]_n$, **649**, 252
Potassium alkalide
Cleavage of different ether bonds in butyl glycidyl ether and allyl glycidyl ether by K^-, K^+(15-crown-5)$_2$, **660**, 133
Selective cleavage of the linear ether bond in benzyl glycidyl ether and triphenylmethyl glycidyl ether by potassium alkalide as two-electron-transfer reagent, **660**, 6
Potassium anions
Cleavage of different ether bonds in butyl glycidyl ether and allyl glycidyl ether by K^-, K^+(15-crown-5)$_2$, **660**, 133
Powder diffraction
Alkyne oligomerization catalyzed by molybdenum(0) complexes, **649**, 173
Powders
Porous boron nitride supports obtained from molecular precursors. Influence of the precursor formulation and of the thermal treatment on the properties of the BN ceramic, **657**, 98
P–P bond
Isolation and structural characterisation of two sterically crowded diphosphanes, **656**, 43
p-Phenylene-bis(picoline)aldamine
Synthetic, spectral and structural aspects of some Rh(III) pentamethylcyclopentadiene complexes containing *N*,*N*′-donor bridging ligands, **658**, 43
Preceramics
Dehydrocoupling of tris(hydridosilylethyl)boranes and cyanamide: a novel access to boron-containing polysilylcarbodiimides, **659**, 29
Precursor
Boron nitride thin fibres obtained from a new copolymer borazine–tri(methylamino)borazine precursor, **657**, 107
Synthesis and characterization of monomeric Ba and Sr complexes with malonate and Lewis base ligands, **648**, 214
Predetermination of configuration
Diastereoselective synthesis of C_2-symmetric hexacoordinated phosphate anions (HYPHATs) with predetermined chirality from 1,2-diaryl-ethane-1,2-diols, **643-644**, 392
Primary arsine
'User-friendly' primary phosphines and an arsine: synthesis and characterization of new air-stable ligands incorporating the ferrocenyl group, **656**, 120
Primary phosphine
'User-friendly' primary phosphines and an arsine: synthesis and characterization of new air-stable ligands incorporating the ferrocenyl group, **656**, 120
Proliferative effect
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, **643-644**, 350
Propellers
A structural and mechanistic investigation of the mono-*O*-phenylation of diols with $BiPh_3(OAc)_2$, **662**, 98
Protonation
Synthesis and properties of homoannularly- and heteroannularly carbonyl-bridged binuclear ruthenocene derivatives, **648**, 72
Synthesis and structural characterization of $[H(OEt_2)_2]^+[(C_3H_3N_2)\{B(C_6F_5)_3\}_2]^-$ — a Brønsted acid with an imidazole-derived 'non-coordinating' anion, **641**, 148
Proton transfer
Reactivity of ammonium and iminium tetraphenylborates towards Pd(0)-complexes: selective allyl or proton transfer to Pd(0). Evidence of formation of the species $[HPd(dppe)_2][BPh_4]$, **662**, 112
P–Sn coordination
Synthesis and structural behavior of the P-functional organotin chlorides $[Ph_2P(CH_2)_3]_2SnCl_2$, $Ph_2P(CH_2)_3SnCl_2Me$, and $Ph_2P(CH_2)_nSnCl_3$ ($n = 2, 3$), **650**, 25
P-stereogenic *o*-phosphinophenols
Totally diastereoselective synthesis of new P-chirogenic *o*-trimethylsiloxyaryl diazaphospholidines and *o*-hydroxyaryl diazaphospholidine–borane complexes, **643-644**, 237
Pt(II) complex
Synthesis and redox property of the binuclear Pt(II) complexes bridged by thieno[3,2-*b*]thiophenes, **654**, 56
Pt → Pb bonds
A luminescent Pt_3Pb cluster with three Pt(II) → Pb(II) bonds, **663**, 284
Pulse shaping
Time-resolved organometallic photochemistry: Femtosecond fragmentation and adaptive control of $CpFe(CO)_2X$ (X = Cl, Br, I), **661**, 199

(+)-Pumiliotoxins A and B
A convergent total synthesis of pumiliotoxins A and B via palladium-catalyzed cross-coupling reaction of homoallylic organozinc compounds with vinyl iodides, **653**, 229
Pybox
Defining effective chiral binding sites at lanthanides—highly enantioselective reagents and catalysts from binaphtholate and pybox ligands, **647**, 151
Pyranylidene
Synthesis of 2-pyranylidene or (2-furyl)carbene–chromium complexes from conjugated enyne carbonyl compounds with $Cr(CO)_5(THF)$, **645**, 228
Pyrazol
Structural and dynamic studies in solution of anionic dinuclear azolato-bridged palladium(II) complexes, **663**, 108
Pyrazole
Synthesis and evaluation of substituted pyrazoles palladium(II) complexes as ethylene polymerization catalysts, **660**, 108
Pyrazolylborate
The reaction of samarium(II) with manganese carbonyl: unexpected conversion of CO to formate. X-ray crystal structures of $[Sm(Tp^{Me2})_2]Mn(CO)_5$ and $\{[Sm(Tp^{Me2})_2]_2(\mu\text{-}HCO_2)\}Mn(CO)_5$ (Tp^{Me2} = HB(3,5-dimethylpyrazolyl), **664**, 298
Pyrazolylmethane
Iron(II) complexes containing poly(1-pyrazolyl)methane ligands, **655**, 146
Pyridazines
Doubly cyclopalladated pyridazines: chiral liquid crystals, **645**, 246
Pyridine
Design, synthesis and solid state structural characterisation of a metallacyclophane formed by a diazadioxamacrocycle bearing two pyridines and silver(I) cation, **643-644**, 376
Pyridine-2-carbaldehyde azine
Synthetic, spectral and structural aspects of some Rh(III) pentamethylcyclopentadiene complexes containing *N*,*N*′-donor bridging ligands, **658**, 43
Pyridinediols
Multinuclear NMR and X-ray diffraction study of pentacoordinated siloxane structures derived of pyridine diols, **648**, 280
Pyridine ligands
Reactions of cobaloxime η^1-allyl complexes with electron deficient alkenes, **656**, 217
Pyridine-2-thiolato complexes
New insights into the reactivity of the tantalocene hydride Cp'_2TaH_3 ($Cp' = \eta^5$-$^t BuC_5H_4$). Synthesis and characterisation of cationic Ta(V) complexes with 0,0 and *S*,*N* chelating ligands, **656**, 139
Pyridyl
A novel and convenient synthesis towards 2-pyridylselenium compounds: X-ray crystal structure of 4,4′-dimethyl-2,2′-dipyridyl diselenide and tris(2-pyridylseleno)methane, **658**, 71
Pyridyl amine
Allyl complexes of molybdenum with Schiff base ligands. The crystal structures of $[MoCl(CO)_2\{N(C_6H_4\text{-}2\text{-}OMe)=C(Me)\text{-}C_5H_4N\}(\eta^3\text{-}C_3H_5)]$ and $[MoCl(CO)_2\{N(Me)=C(Ph)C_5H_4N\}\text{-}(\eta^3\text{-}C_3H_5)]$ are described, **660**, 91
Pyridylsilyl group
Pyridylsilyl group-driven cross-coupling reactions, **653**, 105
Pyridylthioether
The marked influence of steric and electronic properties of ancillary pyridylthioether ligands on the rate of allene insertion into the palladium–carbon bond, **650**, 43
Pyrrole
Oxidative insertion into the N–H bond of carbazole, indole and pyrrole with zerovalent metals, **664**, 170
Pyrylium
Exploiting the versatility of organometallic cross-coupling reactions for entry into extended aromatic systems, **653**, 215
Quantum chemical calculations
Chromium tricarbonyl complexes with biphenylene as η^6 ligand: synthesis, structure, dynamic behaviour in solid state and thermal η^6,η^6-haptotropic rearrangements. Experimental (NMR) and theoretical (DFT) studies, **656**, 27
Isomerism of (π-1,3-dimethylallyl)(phosphinooxazoline)Pd complexes: a comparison between experiment and theory, **641**, 67
Quantum chemistry calculation
Dihydrogen bonding of decahydro-*closo*-decaborate(2−) and dodecahydro-*closo*-dodecaborate(2−) anions with proton donors: experimental and theoretical investigation, **657**, 155
Quaternisation
Lithiation of ferrocenylamines and vanadium dinitrogen chemistry, **664**, 245
Quinolines
Ruthenium-catalyzed reductive cyclization of nitroarenes with trialkylamines leading to quinolines, **650**, 65
8-Quinolinol
Synthesis and reactivity of $Al(Et)q'_2$ (q′ = 2-methyl-8-quinolinolato) and crystal structures of $[Al(Et)_2q]_2$ and Alq'_2q (q = 8-quinolinolato), **654**, 229
8-Quinolinolate
Reactions of the cationic diruthenium carbonyl complex $[Ru_2(\mu\text{-}dppm)_2(CO)_4(\mu,\eta^2\text{-}O_2CMe)]^+$ with bidentate ligands; intramolecularly assisted stereospecific synthesis via the second-sphere face-to-face $\pi-\pi$ stacking interactions, **650**, 268
1-[8-(Quinolylthio)methyl]silatrane
Synthesis and UV spectra of 8-mercaptoquinoline organosilicon derivatives and their metal halides complexes, **642**, 91
(8-Quinolylthiomethyl)trimethoxysilane
Synthesis and UV spectra of 8-mercaptoquinoline organosilicon derivatives and their metal halides complexes, **642**, 91
(8-Quinolylthiomethyl)trimethylsilane
Synthesis and UV spectra of 8-mercaptoquinoline organosilicon derivatives and their metal halides complexes, **642**, 91
1,4-Quinone
Non-catalyzed addition reactions of $Cl_3SiSiCl_3$ with 1,2-diketones, 1,2-quinones and with a 1,4-quinone, **651**, 15
1,2-Quinones
Non-catalyzed addition reactions of $Cl_3SiSiCl_3$ with 1,2-diketones, 1,2-quinones and with a 1,4-quinone, **651**, 15
Quinoxaline
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)iminomethanes via possible generation of (amino)(boryl)carbene species, **643-644**, 508

Radical
Stereoselective hydrostannation of substituted alkynes with trineophyltin hydride, **650**, 173
Synthesis, structure and reactivity study of 1,1′-bis(*N*-*ter*-butyl-*N*-hydroxyamino)ferrocene, **654**, 210
Radical anion
One-pot dodecanitration of Zn(II) and Ni(II) *meso*-tetrakis-(2,6-dichlorophenyl) porphyrin, and extreme redox properties of the obtained complexes, **643-644**, 522
Radical cation
One-electron oxidation of metal enolates and metal phenolates, **661**, 169
Radical pairs
Spin chemistry of organometallic compounds: 2. Interaction of *N*-bromohexamethyldisilazane with allyltriorganolsilanes, **658**, 228
Radicals
Selective reactions of transition-metal-generated radicals, **661**, 159
Radiochemistry
Radiochemical study of the gas phase reaction of nucleogenic diethylsilylium ions with methanol and butanol, **656**, 258

Radiochromatography
Radiochemical study of the gas phase reaction of nucleogenic diethylsilylium ions with methanol and butanol, **656**, 258
Radiopharmaceuticals
Oxorhenium(V) '3+2' mixed-ligand complexes carrying the SNO/SN donor and C_{60}, **664**, 208
Raman
Raman and infrared spectra and pressure tuning Raman and infrared spectra of multinuclear metal carbyne complexes, **648**, 93
Rare-earth-metal complex
Organo-rare-earth-metal initiated living polymerizations of polar and nonpolar monomers, **647**, 128
Reaction
Unusual reactions of cationic bridging carbyne complexes of dimethylsilane-bridged bis(η^5-cyclopentadienyl)diiron tricarbonyl with carbonylmetal anions, **658**, 214
Reaction intermediates
The reaction of $Co_2(CO)_8$ and $Co_4(CO)_{12}$ with the dipropargylamine [$(HC{\equiv}CCMe_2)_2NMe$]. Synthesis and crystal structure of the complex $Co_4(CO)_{10}(\mu\text{-}CO)[H_2C{=}CC(Me)_2N(Me)C(Me_2)C\text{-}(\mu_4\text{-}C)]$, **656**, 57
Reaction mechanism
Structural and mechanistic studies of the copper(II)-assisted *ortho*-hydroxylation of benzoates by trimethylamine N-oxide, **641**, 70
Reaction mechanisms
A new frontier in the metal-catalyzed cross-coupling reaction field. The palladium-promoted metal–carbon bond formation. Scope and mechanism of a new tool in organometallic synthesis, **653**, 177
The quest for triplet ground state silylenes, **646**, 68
Reaction pathways
Reaction pathways towards 1,1,2,2-tetra^{t}butyldistannanes, **646**, 271
Reactions
Organoaluminum chemistry with low valent aluminum — recent developments, **646**, 4
Reaction steps
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Reactivity
Catalytic oxidations by peroxy, peroxo and oxo metal complexes: an interdisciplinary account with a personal view, **661**, 3
Lithium phosphonium azayldiides $R_3P{=}NLi$. Applications in organic synthesis and coordination chemistry, **646**, 94
Preparation of dinitrogen complexes $Mo(N_2)_2P_4$ stabilised by phosphonite $PPh(OEt)_2$ and phosphinite $PPh_2(OEt)$ ligands, **660**, 55
Synthesis and reactivity of organolanthanoid complexes containing N and S ligands, **647**, 180
Reactivity studies
Synthesis and reactivity of organochalogen ester substituted η^3-butadienyl complexes of Mo(II): crystal structure of $[MoCl(CO)_2(\eta^3\text{-}CH_2C(COSePh)C{=}CH_2)(1,10\text{-phenanthroline})]\cdot 0.5\ CH_2Cl_2$, **664**, 277
Rearrangement
Reactions of $[(PPh_3)_2Pt(\eta^3\text{-}CH_2CCPh)]^+$ with oxygen nucleophiles and chemistry of resultant $[(PPh_3)_2Pt(\eta^3\text{-}CH_2C(OR)CHPh)]^+$ complexes, **655**, 192
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, **643-644**, 342
Rearrangement reaction
The rearrangement of 3-vinylcyclobutene derivatives promoted by metallic Lewis acids, **656**, 299
Redox
Intramolecular interactions in 2,6-pyridylacetylenes and their $Co_2(CO)_4$dppm complexes, **648**, 251
Redox-active cryptand
The synthesis and complexation of a cobaltocenium-based redox-active cryptand containing the phenanthroline unit, **648**, 8
Redox behavior
Synthesis and redox property of the binuclear Pt(II) complexes bridged by thieno[3,2-*b*]thiophenes, **654**, 56
The synthesis and redox behaviors of binuclear ruthenocene derivatives bridged by an aromatic moiety, **655**, 23
Redox chemistry
Strain in organometallics: synthesis of rhodium and iridium complexes with a novel rigid tetrachelating phosphine olefin ligand and their redox properties, **641**, 227
Redox transmetalation
A new half-sandwich Yb(II) complex with the tridentate cyclopentadienyl ligand $[C_5H_4CH_2CH(O)CH_2OBu^n]^{2-}$: synthesis, self-assembly of a tetranuclear cubane-like framework $\{[(\eta^5\text{-}C_5H_4)CH_2CH(\mu^3{:}\eta^1\text{-}O)CH_2OBu^n]Yb\}_4$ and oxidative alkylation by Me_2Hg to the Yb(III) derivative $[(\eta^5\text{-}C_5H_4)CH_2CH(\eta^1\text{-}O)CH_2OBu^n]YbMe(THF)$, **647**, 94
Reduction
A practical access to α-phosphonoenamides, **643-644**, 404
Isolation and structural characterisation of two sterically crowded diphosphanes, **656**, 43
Lanthanide(II) complexes bearing mixed linked and unlinked cyclopentadienyl–monodentate-anionic ligands, **647**, 61
Preparation of dinitrogen complexes $Mo(N_2)_2P_4$ stabilised by phosphonite $PPh(OEt)_2$ and phosphinite $PPh_2(OEt)$ ligands, **660**, 55
Reaction of silylpentacarbonylmanganese with hydride-transfer reagents: reduction of carbonyl ligands accompanied with Si–C C and C–C coupling, **650**, 91
Recent advances in f element reduction chemistry, **652**, 61
Reductive acetoxylation
Syntheses of the $B_{(8)}$-hydroxy- and $B_{(8,8')}$-dihydroxy-derivatives of the bis(1,2-dicarbollido)-3-cobalt(1-)ate ion by its reductive acetoxylation and hydroxylation: molecular structure of [8,8′-μ-$CH_3C(O)_2{<}(1,2\text{-}C_2B_9H_{10})_2\text{-}3\text{-}Co]^0$ zwitterion determined by X-ray diffraction analysis, **649**, 181
Reductive cyclization
Cross-coupling reactions in the chemistry of silole-containing π-conjugated oligomers and polymers, **653**, 223
Ruthenium-catalyzed reductive cyclization of nitroarenes with trialkylamines leading to quinolines, **650**, 65
Reductive debromination
Investigations into the Suzuki–Miyaura coupling aiming at multi-kilogram synthesis of E2040 using (*o*-cyanophenyl)boronic esters, **653**, 269
Reductive elimination
A reminiscence and a future prospect of transition metal-catalyzed cross-coupling processes, **653**, 5
Discovery of the cross-coupling reaction between Grignard reagents and $C(sp^2)$ halides catalyzed by nickel–phosphine complexes, **653**, 23
Reductive metalation
Polylithiumorganic compounds: Part 28. The reaction of allene and alkyl substituted allenes with lithium metal, **642**, 1
Reformatsky compounds
EXAFS investigation of metal organic synthesis tools, **649**, 128
Regioselective fluorination
Regioselective, stereospecific, and chemoselective fluorination of epoxy alcohols: development of fluorinating hybrid reagents, associated with Lewis acid metal fluoride/ammonium hydrogen fluoride, **662**, 77
Regioselective palladation
Regioselective palladation of 2-oxazolinyl-[2.2]paracyclophanes. Synthesis of planar-chiral phosphines, **662**, 23

Regioselectivity
The synthesis of a hydroazulen-2-one skeleton-determination of the diastereoselectivity of [3+2] cycloaddition of tricarbonyl[(4,5,6,7-η)-2-methyltropone]iron with *E*/*Z*-η¹-(crotyl)Fp, **659**, 43
Reiswigin
The synthesis of a hydroazulen-2-one skeleton-determination of the diastereoselectivity of [3+2] cycloaddition of tricarbonyl[(4,5,6,7-η)-2-methyltropone]iron with *E*/*Z*-η¹-(crotyl)Fp, **659**, 43
Removable directing group
Pyridylsilyl group-driven cross-coupling reactions, **653**, 105
Retrocyclization
Retrocyclization reactions of *gem*-dibromo(ferrocenyl)cyclopropanes, **645**, 183
Review
Insertions into lanthanide–ligand bonds in organolanthanide chemistry, **647**, 28
Rh-catalyzed hydrosilylation
New amino-, imino- and oxazolinophosphites based on 1,1′-bi-2-naphtol: coordination and catalytic properties, **655**, 204
Rhenium
Dimers of highly π-loaded organoimido d^1 metal radicals of niobium, tantalum, molybdenum, tungsten, and rhenium: the context of the cyclopentadienyl imido ligand analogy, **655**, 96
Oxorhenium(V) '3+2' mixed-ligand complexes carrying the SNO/SN donor and C_{60}, **664**, 208
Reactions of dirhenium heptoxide with manganese(I) and rhenium(I) hydrido, alkoxo, methylcarbonato, carbonato-bridged, and methoxymethyl complexes. The X-ray structures of *fac*-$(CO)_3$(dppp)$MnOReO_3$ and *fac*-$(CO)_3$(dppp)$ReOReO_3$, **658**, 88
Reactions of the tetramethylfulvene ligand coordinated to rhenium with hydrohalic acids and halogens: synthesis of dicarbonyl complexes with a 'four-legged piano-stool' structure containing mixed-halide ligands, **662**, 130
Synthesis, characterization and theoretical studies of new heterometallic carbonyl clusters bridged by 4,4′-dipyridyl unit, **655**, 39
Vibrational spectroscopic and force field studies of (η⁵-Cp)ML_3-type complexes (M = Mn, Re; L = CO, O), **642**, 246
Rhenium carbonyl complexes
Rhenium tricarbonyl complexes of tris(pyrazolyl)methane ligands: first structural characterization of an isomer pair of tris(pyrazolyl)methane derivatives and the supramolecular structure of the homobimetallic complex {1,4-C_6H_4[$CH_2OCH_2C(pz)_3$]$_2$[Re$(CO)_3$]$_2$}$(Br)_2$, **658**, 50
Rhenium clusters
A series of soluble, discrete homo and heteroleptic Ca(II) complexes of hexanuclear sulfidochloride rhenium clusters, $[Ca(X)_n(Y)_m][Re_6S_6Cl_8]$, ($n = 6$, $m = 0$, X = DMF, THF, DMSO; $n = 4$, $m = 3$, X = MeCN, Y = THF, dioxane) and the 1D co-ordination polymer $[Ca(MeCN)_3(OH_2)_2$(dioxane)$_2][Re_6S_6Cl_8]\cdot$(dioxane)(MeCN), **643-644**, 301
Rhenium heptoxide
Reactions of dirhenium heptoxide with manganese(I) and rhenium(I) hydrido, alkoxo, methylcarbonato, carbonato-bridged, and methoxymethyl complexes. The X-ray structures of *fac*-$(CO)_3$(dppp)$MnOReO_3$ and *fac*-$(CO)_3$(dppp)$ReOReO_3$, **658**, 88
Rhenium(I)
Reaction of bromopentacarbonylrhenium(I) with ferrocenylcarbaldehyde thiosemicarbazones: the first X-ray diffraction studies of metal carbonyl complexes containing bidentate thiosemicarbazone ligands, **656**, 1
Tricarbonylrhenium(I) complexes of phosphine-derivatized amines, amino acids and a model peptide: structures, solution behavior and cytotoxicity, **650**, 123
Rhodacarboranes
Synthesis and reactivity of the rhodium monocarbollide complexes [1-NH=CMe_2-2-Cl-2-PPh_3-*closo*-2,1-$RhCB_{10}H_{10}$] and [1-NH_3-2-Cl-2-PPh_3-*closo*-2,1-$RhCB_{10}H_{10}$], **651**, 34
Rhodium
A comparative study on structures and theoretical models of Rh azido complexes, **654**, 170
Chemistry on a metallathiaborane cluster Part 4: reactions of 11-vertex rhodathiaboranes with bidentate phosphines and their subsequent rearrangements, **657**, 40
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136
From homogeneous to heterogeneous catalysis: zeolite supported metal complexes with C_2-multidentate nitrogen ligands. Application as catalysts for olefin hydrogenation and cyclopropanation reactions, **655**, 134
Investigation of the hydroformylation of ethylene in liquid carbon dioxide, **650**, 249
New benzotriazole derivatives as multifunctional ligands, **658**, 251
New half-sandwich heterobimetallic CpMPt (M = Rh, Ir) dithiolato bridged complexes. X-ray structure of $[(PPh_3)_2Pt(\mu$-$S(CH_2)_2S)RhCl(\eta^5$-$C_5H_5)]BF_4$, **662**, 188
New optically active 'constrained-geometry' cyclopentadienylphosphine ligands and their metal complexes, **663**, 183
Polyether phosphite for hydroformylation of higher olefins in non-aqueous system and catalyst recovery, **654**, 83
Reactivity of osmium–rhodium mixed-metal cluster $[Os_3Rh(\mu$-$H)_3(CO)_{12}]$ towards vinyl containing ligands, **659**, 151
Rhodium(I) catalysed diboration of (*E*)-styrylboronate esters: molecular structures of (*E*)-*p*-MeO–C_6H_4–CH=CH–B(1,2-$O_2C_6H_4$) and *p*-MeO–C_6H_4–$CH_2C\{B(1,2\text{-}O_2C_6H_4)\}_3$, **652**, 77
Strain in organometallics: synthesis of rhodium and iridium complexes with a novel rigid tetrachelating phosphine olefin ligand and their redox properties, **641**, 227
Synthesis and complexation of a new facultative tridentate S_2Te donor ligand $MeS(CH_2)_3Te(CH_2)_3SMe$: crystal structures of $[Rh(Cp^*)(S_2Te)][PF_6]_2$ and $[PtCl(S_2Te)]PF_6$, **649**, 214
Synthesis and reactivity of the rhodium monocarbollide complexes [1-NH=CMe_2-2-Cl-2-PPh_3-*closo*-2,1-$RhCB_{10}H_{10}$] and [1-NH_3-2-Cl-2-PPh_3-*closo*-2,1-$RhCB_{10}H_{10}$], **651**, 34
Synthesis and structure of rhodium complexes with monoanionic carborane ligand $[9\text{-}SMe_2\text{-}7,8\text{-}C_2B_9H_{10}]^-$, **657**, 115
Synthesis, characterisation and molecular structure of $[Rh(COE)_2(acac)]$ (COE = cyclooctene, η^2-C_8H_{14}), an important starting material for the preparation of rhodium catalyst precursors, **649**, 199
The metal–carbon bond in vinylidene, carbonyl, isocyanide and ethylene complexes, **661**, 181
The reactivity of new (1,5-cyclooctadiene)rhodium acylpyrazolonates towards N- and P-donor ligands: X-ray structures of $[Rh(1,5\text{-}COD)Q^s]$, $[Rh(1,5\text{-}COD)(phen)]Q^s\cdot 0.5H_2O$ (HQ^s = 1-phenyl-3-methyl-4-(2-thenoyl)-pyrazol-5-one) and $[Rh(1,5\text{-}COD)Br]_2$, **651**, 5
Rhodium–acetylacetonate dimers
Rhodium complexes of 3,4-di(β-naphthyl)-2,5-diarylcyclopentadienone: indirect detection of slowed naphthyl rotation, **656**, 243
Rhodium and Iridium complexes
Chiral sulfur diphosphazanes derived from S-$(Ph_2P)_2N$(CHMePh) and its rhodium(I), (III) and iridium(III) complexes. Crystal structures of $Ph_2P(S)N(CHMePh)PPh_2$, $\{Ph_2P(S)\}_2N$(CHMePh) and $[(Cp^*)MCl\{\eta^2$-P,S-$Ph_2PNHP(S)Ph_2\}]BF_4$, $Cp^* = \eta^5$-C_5Me_5; M = Rh, Ir, **651**, 90
Rhodium–carbene complexes
Structural characterization and catalytic activity of the rhodium–carbene complex $Rh(PPh_3)_2$(IMes)Cl (IMes = bis(1,3-(2,4,6-trimethylphenyl)imidazol-2-ylidene), **658**, 126

Rhodium catalyst
Rhodium-catalyzed coupling of sodium tetraphenylborate with acid anhydrides in the presence or absence of norbornene, **648**, 297
Rhodium complexes
'Diopium', a chiral phosphoniophosphine derived from Kagan's diop. Rhodium complexes and reducing catalytic properties, **654**, 180
New amino-, imino- and oxazolinophosphites based on 1,1′-bi-2-naphtol: coordination and catalytic properties, **655**, 204
New highly fluorinated dirhodium(II) tetrakis(alkanecarboxylates) as catalysts for carbenoid C–H insertion reactions, **643-644**, 174
Proton induced coupling reactions in dinuclear σ-alkynyl-μ-methylene-rhodium complexes, **663**, 145
Reaction of $[RhCl(CO)_2]_2$ or $[RhCl(COD)]_2$ with *o*-(diphenylphosphino)benzaldehyde. Formation of hemiaminals in the subsequent reaction with dihydrazones, **648**, 149
The first metal complexes of bis(diisopropylamino)carbene: synthesis, structure and ligand properties, **649**, 219
Rhodium(I)
Supported organometallic complexes: Part XXX. Hydroformylation of 1-hexene in interphases — the influence of different kinds of inorganic–organic hybrid co-condensation agents on the catalytic activity, **641**, 165
Rhodium pentamethylcyclopentadiene complexes
Synthetic, spectral and structural aspects of some Rh(III) pentamethylcyclopentadiene complexes containing *N*,*N*′-donor bridging ligands, **658**, 43
Rhodium–pyrazolate complexes
Chemistry of Rh(I) complexes based on mesogenic 3,5-disubstituted pyrazole ligands. X-ray crystal structures of 3,5-di(4-*n*-butoxyphenyl)pyrazole (Hpz^{bp2}) and $[Rh(\mu\text{-}pz^{R2})(CO)_2]_2$ ($R = C_6H_4OC_nH_{2n+1}$, $n = 10, 12$) compounds. Part II, **654**, 150
Rhodium–pyrazole complexes
Chemistry of Rh(I) complexes based on mesogenic 3,5-disubstituted pyrazole ligands. X-ray crystal structures of 3,5-di(4-*n*-butoxyphenyl)pyrazole (Hpz^{bp2}) and $[Rh(\mu\text{-}pz^{R2})(CO)_2]_2$ ($R = C_6H_4OC_nH_{2n+1}$, $n = 10, 12$) compounds. Part II, **654**, 150
Ring formation
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, **643-644**, 253
Ring opening
Structural properties of azaphosphirane and its $W(CO)_5$ complex. A density functional study, **643-644**, 369
The lactone concept—a novel approach to the metal-assisted atroposelective construction of axially chiral biaryl systems, **661**, 31
Ring-opening metathesis polymerization
Steric isomerization of alkyne–dialkyltungsten complexes with a chelating diaryloxo ligand: crystal structures of C_s- and C_1-$W(\eta^2\text{-}RC{\equiv}CR)[2,2'\text{-}S(4\text{-}Me\text{-}6\text{-}R'C_6H_2O)_2](CH_2SiMe_3)_2$, **664**, 234
Synthesis of *cis*-dichloride complexes of Group 6 transition metals bearing alkyne and chalcogen-bridged chelating bis(aryloxo) ligands as catalyst precursors for ring-opening metathesis polymerization, **654**, 74
Synthesis of novel oxo complexes of tungsten and molybdenum with various chalcogen-bridged chelating bis(aryloxo) ligands and their catalytic behavior for ring-opening metathesis polymerization, **651**, 114
Ring-opening polymerisation
Synthesis, structure and catalytic activity of new iminophenolato complexes of scandium and yttrium, **663**, 63
Ring-opening polymerization
Silane-induced ring-opening polymerization of 1,1,3,3-tetramethyl-2-oxa-1,3-disilacyclopentane catalyzed by a triruthenium cluster, **660**, 145
Synthesis and characterization of $(C_5H_9C_9H_6)_2Yb(THF)_2$(II) (**1**) and $[(C_5H_9C_5H_4)_2Yb(THF)]_2O_2$ (**2**), and ring-opening polymerization of lactones with **1**, **650**, 84
Ring slippage
The effect of trimethylsilyl substituents on the ring-slippage of bis-indenyl-molybdenocene derivatives, **648**, 270
ROMP
Allenylidene-ruthenium-arene precatalyst for ring opening metathesis polymerisation (ROMP), **663**, 235
Rotation
New studies on the apparent allyl rotation in scorpion-like palladium complexes. The influence of non-directly bonded groups. X-ray molecular structures of $[Pd(\eta^3\text{-}2\text{-}Me\text{-}C_3H_4)L]TfO$, L = bpzmArOMe and bpz*mCy, **650**, 210
Ru–arene complexes
A weak η^1 π-bonding mode for Ru–arene complexes. Nitrile, isonitrile and phosphine derivatives of Ru–phosphino–arene chelating complexes, **643-644**, 214
Rubidium
Synthesis of heavier alkali metal phospholides. Crystal structure of caesium 2,3,4,5-tetramethylphospholide, an ionic solid, **642**, 208
Ru organometallics
Mass spectrometry of polystyrene and polypropene ruthenium complexes. A new tool for polymer characterization, **663**, 213
Ruthenium
A bridging ligand featuring terminal 2-pyridylphosphole moieties: synthesis, optical properties and Ru(II)-complex, **643-644**, 494
Acid controlled alkyne dimerisation initiated by a Ru–carbene precursor, **659**, 159
A tertiary phosphine that is too bulky: preparation of catalytically less active carbene and vinylidene ruthenium(II) complexes, **641**, 203
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Carbonyl substitution chemistry of neutral and cationic triruthenium cluster complexes derived from 1,1-dimethylhydrazine. Incorporation of two and three phosphane ligands, **663**, 227
Cationic ruthenium(II) complexes containing a chelating $\eta^1{:}\eta^6$-phosphinoarene ligand; $[RuCl(L)(PPh_2(CH_2)_3\text{-}\eta^6\text{-}C_6H_5)][PF_6]$ (L = $P(OPh)_3$, $P(OMe)_3$, PPh_3, PMe_3, NCMe, NC_5H_5), **659**, 1
CH and PC bond activations of PMe_2Ph ligands by an octahedral Ru_6 cluster, **651**, 124
Chiral arene ruthenium complexes: Part 3. [Ruthenium(η^6-arene)(η^4-1,5-cyclooctadiene)] complexes with N or O donor functions in the arene side chain, **641**, 90
Convenient access to an alkenyl(biscarbene)-bridged heterobinuclear (Ru–W) complex. X-ray structure of $[(\eta^6\text{-}C_6Me_4H_2)Ru{=}C(OMe)(CH{=}CHC_6H_4CH{=}CH\text{-}CO_2Me)(Cl)(Me)(Cl)(PMe_3)][PF_6]$, **643-644**, 498
Cyclic thioether and acyclic thioether–thiolate complexes of pentamethylcyclopentadienyl ruthenium(II, III), **664**, 161
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136
Electrochemistry of $Ru_2Cp_2'(CO)_4$ and $Ru_2Cp_2(CO)_3(PMe_3)$ and the estimation of $Ru_2(\mu\text{-}H)$ bond dissociation enthalpies, **656**, 181
Generation of $[1,2\text{-}(CH_2)_2C_5Me_3MC_5Me_4CH_2\text{-}1']^{3+}$ (M = Ru, Os) trications and determination of their structures by comparing NMR-spectra with density-functional method calculations, **645**, 87
Organometallic complexes for nonlinear optics: Part 25. Quadratic and cubic hyperpolarizabilities of some dipolar and quadrupolar gold and ruthenium complexes, **642**, 259

Phosphine substituted $Ru_3(\mu\text{-dppm})(CO)_{10}$: structural trends within $[Ru_3(\mu\text{-dppm})(PR_3)(CO)_9]$ (R = Et, Ph, Cy and Pr^i), **655**, 227

Reaction of ruthenium complexes containing heterocyclic thiazine–thione ligand, **660**, 127

Reactions of $Ru(C{\equiv}CPh)(L_2)Cp^*$ (L_2 = dppm, dppe) with tetracyanoethene: cycloaddition, formation of monodentate dppm and dppmO complexes and migration of CN to ruthenium, **650**, 141

Reactions of the cationic diruthenium carbonyl complex $[Ru_2(\mu\text{-dppm})_2(CO)_4(\mu,\eta^2\text{-}O_2CMe)]^+$ with bidentate ligands; intramolecularly assisted stereospecific synthesis via the second-sphere face-to-face $\pi-\pi$ stacking interactions, **650**, 268

Reactivity of *cyclo*-$(PhX)_6$ (X = As, P) towards $[M_3L_2(CO)_{10}]$ (M = Ru, L = CO or NCMe; M = Fe, L = CO), **664**, 27

Ruthenium cluster carbonyls containing ligands derived from ferrocenylalkynes, **650**, 188

Ruthenium hydrides bearing $SbPh_3$ and $AsPh_3$ ligands: characterization of the bis(dihydrogen) complexes $[Cp^*Ru(H_2)_2(EPh_3)]^+$ ($Cp^* = C_5Me_5$; E = Sb, As), **663**, 151

Syntheses and structures of dimethylamino-bridged bis(silylene)ruthenium and -osmium complexes, **645**, 235

Syntheses and structures of some coordinatively saturated and unsaturated diruthenium carbonyl complexes, **658**, 117

Syntheses, X-ray structures, and reactions of ruthenium carbonyl complexes containing 1,1-dithiolates, **650**, 37

Synthesis and characterization of 2-oxacycloalkylideneruthenium(II) complexes: X-ray crystal structure of the 2-oxacycloheptylidene complex $[Ru\{{=}\overline{COCH_2(CH_2)_3CH_2}\}(\eta^5\text{-}C_9H_7)(PPh_3)_2][PF_6]\cdot CH_2Cl_2$, **651**, 22

Synthesis and X-ray structures of hydridotris(1-pyrazolyl)borate carbonyl complexes of ruthenium, **648**, 193

Synthesis, characterization, and reactivity of half-sandwich Ru(II) complexes containing phosphine, arsine, stibine, and bismutine ligands, **649**, 55

Synthesis, reactivity and structures of ruthenium carbonyl clusters with telluride and hydride ligands, **659**, 22

The $Cl_2(PCy_3)(IMes)Ru(=CHPh)$ catalyst: olefin metathesis versus olefin isomerization, **643-644**, 247

Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, **643-644**, 231

Ruthenium arene complexes

Stable mononuclear and binuclear ruthenium(II) arene complexes with multiple N-donor poly-pyridyl ligands: synthesis, spectroscopic and structural characterization. Single crystal X-ray structure of $[(\eta^6\text{-}C_{10}H_{14})RuCl(bppz)]BF_4$, **642**, 48

Synthetic, spectral, electrochemical and structural aspects of some Ru(II) arene complexes with some novel bridging ligands, **648**, 27

Ruthenium carbenes

An 'Old Hydride' in a new synthesis: a convenient approach to Grubbs-type carbene complexes $(PPh_3)_2Cl_2Ru{=}CH{-}CH{=}CR_2$ and their hexacoordinate acetonitrile adducts, **641**, 220

Ruthenium catalyst

Allenylidene-ruthenium-arene precatalyst for ring opening metathesis polymerisation (ROMP), **663**, 235

Ruthenium-catalyzed reductive cyclization of nitroarenes with trialkylamines leading to quinolines, **650**, 65

Ruthenium catalysts

Ruthenium-catalyzed hydrosilylation of terminal alkynes: stereodivergent synthesis of (*E*)- and (*Z*)-alkenylsilanes, **645**, 192

Ruthenium clusters

Carbonyl substitution chemistry of neutral and cationic triruthenium cluster complexes derived from 1,1-dimethylhydrazine. Incorporation of two and three phosphane ligands, **663**, 227

Silane-induced ring-opening polymerization of 1,1,3,3-tetramethyl-2-oxa-1,3-disilacyclopentane catalyzed by a triruthenium cluster, **660**, 145

Ruthenium complexes

A study of the coordination ability of 2,5-di(2-pyridyl)phospholes on Ru centres, **663**, 118

Preparation, structures, and haptotropic rearrangement of novel dinuclear ruthenium complexes, $(\mu_2,\eta^3{:}\eta^5\text{-guaiazulene})Ru_2(CO)_4(CNR)$, **650**, 96

Ruthenium complexes with 2,2′-, 2,4′- and 4,4′-bipyridine ligands: The role of bipyridine coordination modes and halide ligands, **655**, 31

Stereoselective addition reactions of ruthenium thioaldehyde complexes, **661**, 129

Ruthenium corrole homodimers

Synthesis, physicochemical and electrochemical properties of metal–metal bonded ruthenium corrole homodimers, **652**, 69

Ruthenium hydrides

An 'Old Hydride' in a new synthesis: a convenient approach to Grubbs-type carbene complexes $(PPh_3)_2Cl_2Ru{=}CH{-}CH{=}CR_2$ and their hexacoordinate acetonitrile adducts, **641**, 220

Ruthenium(II)

New ruthenium(II) complexes containing the chiral ligand (4*S*)-2-[(S_p)-2-(diphenylphosphino)ferrocenyl]-4-(methylethyl)oxazoline (FcPN). X-ray structures of *mer–trans*-$[RuCl_2(dppm)(FcPN)]$ (dppm = bis(diphenylphosphino)methane) and *cis*-$[RuCl_2(CO)(py)(FcPN)]$, **663**, 204

Organometallic complexes of ruthenium(II) with *N*,*N*-dialkylcarbamato as the supporting ligand, **651**, 52

Ruthenium neutral complexes

Reaction of $Cp^*RuCl(PPh_3)_2$ with dioxygen and formation of a neutral complex $Cp^*RuCl(O_2)(PPh_3)$, **663**, 127

Ruthenium, X-ray crystallography

Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, **643-644**, 136

Ruthenocenophane

Synthesis and properties of homoannularly- and heteroannularly carbonyl-bridged binuclear ruthenocene derivatives, **648**, 72

RX structures

Fine tuning of the photophysical properties of cofacial diporphyrins via the use of different spacers, **643-644**, 89

Rydberg spectroscopy

Rydberg spectra of bis(η^6-benzene)chromium derivatives: Gas-phase photoabsorption study of bis(η^6-1,2,4-trimethylbenzene)chromium and bis(η^6-1,2,4,5-tetramethylbenzene)chromium, **649**, 100

Rydberg transitions

Gas-phase electronic absorption spectra of metallocene dihydrides $M(\eta^5\text{-}C_5H_5)_2H_2$ (M = Mo, W), **664**, 106

Salen

Salen-supported dinuclear and trinuclear boron compounds, **654**, 36

Salen and Salan complexes with tin(IV)

Preparation and structural characterization of six new diorganotin(IV) complexes of the $R_2Sn(SaleanH_2)$ and $R_2Sn(SalceanH_2)$ type (R = Me, ^{n}Bu, Ph), **664**, 188

Salicylic acid

Structural and mechanistic studies of the copper(II)-assisted *ortho*-hydroxylation of benzoates by trimethylamine N-oxide, **641**, 70

Salt-elimination

Convenient preparation of $Li[(\eta^5\text{-}C_5Me_5)M(CO)_2]$ (M = Ru, Fe) by the reaction of $(\eta^5\text{-}C_5Me_5)M(CO)_2H$ with *n*-BuLi, **645**, 201

Samarium

Non-hindered ansasamarocenes, versatile catalysts for diene/olefin/polar monomer copolymerisations. What is really the active species?, **647**, 167

Silsesquioxane chemistry. Part 10. Silsesquioxane silanolate complexes of samarium and scandium, **647**, 245
Synthesis of mixed phospholyl/cyclooctatetraenyl–lanthanide complexes. Crystal and molecular structure of (cyclooctatetraenyl)[3,4-dimethyl-2,5-bis(trimethylsilyl)-phospholyl](tetrahydrofuran)neodymium, **647**, 139
The reaction of samarium(II) with manganese carbonyl: unexpected conversion of CO to formate. X-ray crystal structures of $[Sm(Tp^{Me2})_2]Mn(CO)_5$ and $\{[Sm(Tp^{Me2})_2]_2(\mu\text{-}HCO_2)\}Mn(CO)_5$ (Tp^{Me2} = HB(3,5-dimethylpyrazolyl), **664**, 298

Sandwich
C_2-Bridged sandwich and half-sandwich entities with Ti(IV) and Cr(0) centers, **641**, 62

Sandwich complex
Organodiiron(II)-complexes containing a long conjugated hydrazonato spacer. Synthesis, characterization, electrochemical and structural studies, **660**, 71

Sandwich compounds
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136

Sb-Chiral compounds
Synthesis of Sb-chiral organoantimony compounds having intramolecular Sb···N interaction and their separation into optically pure compounds via *ortho*-palladated benzylamine complexes, **656**, 234

Scale-up
Investigations into the Suzuki–Miyaura coupling aiming at multikilogram synthesis of E2040 using (*o*-cyanophenyl)boronic esters, **653**, 269

Scandium
New N- and O-donor ligand environments in organoscandium chemistry, **647**, 145
Silsesquioxane chemistry. Part 10. Silsesquioxane silanolate complexes of samarium and scandium, **647**, 245
Synthesis, structure and catalytic activity of new iminophenolato complexes of scandium and yttrium, **663**, 63

μ_4-S centered spirocyclic form
The reactions of 4,6-dimethyl-2-mercaptopyrimidine with dimetallic compounds: diiron nonacarbonyl and cyclopentadienylmolybedenum tricarbonyl dimer, **655**, 49

Schiff base
Allyl complexes of molybdenum with Schiff base ligands. The crystal structures of $[MoCl(CO)_2\{N(C_6H_4\text{-}2\text{-}OMe)=C(Me)\text{-}C_5H_4N\}(\eta^3\text{-}C_3H_5)]$ and $[MoCl(CO)_2\{N(Me)=C(Ph)C_5H_4\text{-}N\}(\eta^3\text{-}C_3H_5)]$ are described, **660**, 91

Schiff-base
Polynuclear cyclometallated palladium(II) complexes. Crystal and molecular structures of $[(PPh_3)(Cl)PdN(Cy)=C(H)C_6H_2C\text{-}(H)=N(Cy)\ Pd(Cl)(PPh_3)]$ and $[\{PdN(Cy)=C(H)C_6H_2C(H)=N(Cy)Pd\}\{Ph_2PC(H)=C(H)PPh_2\text{-}P,P\}_2][ClO_4]_2$, **655**, 127

Schiff bases
Cyclopalladated compounds with a bidentate [C, N]/terdentate [C, N, S] benzylidenethiophene imine ligand. Crystal and molecular structures of $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H)=NCH_2(C_4H_3S)\}(\mu\text{-}OAc)]_2$, $[Pd\{2,3\text{-}(MeO)_2C_6H_2C(H)=NCH_2(C_4H_3S)\}\text{-}(Cl)\cdot(P\text{-}Ph_3)]$ and $[\{Pd[2,3\text{-}(MeO)_2C_6H_2C(H)=NCH_2(C_4H_3S)](Cl)\}_2(\mu\text{-}Ph_2P(CH_2)_4PPh_2)]$, **654**, 162
Oxorhenium(V) '3+2' mixed-ligand complexes carrying the SNO/SN donor and C_{60}, **664**, 208
Synthesis and derivatization of the 2-amino-*closo*-decaborate anion $[2\text{-}B_{10}H_9NH_3]^-$, **657**, 163
Synthesis and mesomorphic properties of new imines and copper(II) complexes, **655**, 105

s-cis-Diferrocenyltrienes
Synthesis of 'three-petal' carbocyclic systems based on *s-cis*-diferrocenyltrienes, **649**, 86

Secondary bonding
Synthesis and characterization of monomeric diorganotellurium dihalides: crystal and molecular structures of diphenacyltellurium dibromide and -diiodide, **658**, 169

Secondary interactions
Synthesis and molecular structures of dimeric assemblies of telluronium salts derived from $o\text{-}C_6H_4(CH_2TeMe)_2$ and PhMeTe, **642**, 186

Secondary phosphine
Synthesis of Group 4 transition-metal complexes bearing a secondary phosphine pendant cyclopentadienyl ligand, **648**, 231

Secondary phosphine oxides
Regioselective addition of secondary phosphine oxides to 3-(trialkylsilyl)- and 3-(trialkylgermyl)-2-propynals, **659**, 172

Second harmonic generation
Chiral organometallic chromophores for nonlinear optics derived from $[Fe_2(\eta^5\text{-}C_5H_5)_2(CO)_2(\mu\text{-}CO)(\mu\text{-}C\text{–}CH_3)]^+\ [BF_4]^-$, **655**, 70

Selectivity
Catalytic oxidations by peroxy, peroxo and oxo metal complexes: an interdisciplinary account with a personal view, **661**, 3
Cobaltabisdicarbollide anion $[Co(C_2B_9H_{11})_2]^-$ as doping agent on intelligent membranes for ion capture, **657**, 239
Selective reactions of transition-metal-generated radicals, **661**, 159
Site-selective phosphorylation of arylphospholes through reaction with phosphorus tribromide, **643-644**, 32
Structural and mechanistic studies of the copper(II)-assisted *ortho*-hydroxylation of benzoates by trimethylamine N-oxide, **641**, 70

Selena
Synthetic, structural and theoretical studies on the new 2,3-dihydro-1,2,4-thia-, selena- and tellura-diphospholes, $P_2EC_2\text{-}Bu^t_2(H)Me$, (E = S, Se, Te) and their $[M(CO)_5]$ complexes (M = Cr, Mo, W), **659**, 84

Selenium
Synthesis and structure of the novel mixed Sb/Se and Sb/Te containing iron carbonyl clusters $[Fe_3(\mu_3\text{-}Y)(\mu_3\text{-}SbMes)(CO)_9]$ (Y = Se, Te) and $[Fe_3(\mu_3,\eta^2\text{:}\eta^1\text{-}SeSbMes)(\mu_3\text{-}SbMes)(CO)_{10}]$, **658**, 204

Selenoester
Synthesis and reactivity of organochalogen ester substituted η^3-butadienyl complexes of Mo(II): crystal structure of $[MoCl(CO)_2(\eta^3\text{-}CH_2C(COSePh)C=CH_2)(1,10\text{-phenanthroline})]\cdot 0.5\ CH_2Cl_2$, **664**, 277

Self-assembly
Design, synthesis and solid state structural characterisation of a metallacyclophane formed by a diazadioxamacrocycle bearing two pyridines and silver(I) cation, **643-644**, 376

Semisynthetic enzyme
Biocatalytic synthesis of optically active oxyfunctionalized building blocks with enzymes, chemoenzymes and microorganisms, **661**, 17

Sensor
Synthesis of novel chiral bis(ferrocenyl) ligands and their use as voltammetric metal cation sensors, **656**, 211

SERM
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, **643-644**, 350

SET reaction
New linked di-germanocenes and di-stannocenes, **651**, 44

Seven-coordinate
Synthesis and reactions of the cationic seven-coordinate complexes, $[MoI(CO)_3(NCR)\{Ph_2P(CH_2)_nPPh_2\}][BF_4]$ (R = Me, n = 1, 2 and 3; R = Et, n = 1). Crystal structures of $[MoI_2(CO)_2(PPh_3)\text{-}\{Ph_2P(CH_2)PPh_2\}]$, $[MoI(CO)_2\{Ph_2P(CH_2)PPh_2\}_2][BF_4]\cdot CH_2\text{-}Cl_2$, $[MoCl_3O\{Ph_2PO(CH_2)OPPh_2\}]$ and $[Mo_3(\mu_3\text{-}I)_2\{\mu_2\text{-}Ph_2P(CH_2)PPh_2\}_3]I$, **664**, 45

S-glutathionyl
Synthesis, X-ray absorption spectroscopy and purification of the seleno-bis (*s*-glutathionyl) arsinium anion from selenide, arsenite and glutathione, **650**, 108
Si–C bond cleavage
Si–C bond cleavage in the reaction of gallium chloride with lithium bis(trimethylsilyl)amide and thermolysis of base adducts of dichloro(trimethylsilyl)amido gallium compounds, **649**, 268
Si–C coupling
Reaction of silylpentacarbonylmanganese with hydride-transfer reagents: reduction of carbonyl ligands accompanied with Si–C C and C–C coupling, **650**, 91
β-SiH monoagostic interactions
β-SiH agostic bonding in sterically crowded lanthanidocene silylamide complexes, **647**, 236
Silaalkene
2-[(8-Dimethylaminonaphthalen-1-yl)dimethylsilyl]-*N*,*N*,4,4-tetramethyl-1,2,3,3*a*,4,5-hexahydro-4-sila-5,9*b*-ethenobenz[*e*]inde-9-amine. An unexpected by-product from the reaction of 1-lithio-8-dimethylaminonaphthalene with chlorodimethylvinylsilane, **654**, 3
Sila-3-bicyclo[3.2.0]heptanes
Stereoselective polycyclisations of allyl and enyne silanes: evidence for a bicyclo[3.2.0]hept-1(7)ene structure, **643-644**, 324
Silaboration
Regio- and stereoselective addition of sterically hindered silylboranes to terminal alkynes, **646**, 179
Silaketene
Reactions of methyl(phenyl)silylene with CO and PH_3—the formation of acid–base complexes, **641**, 156
Silane bridged metallocene
Polymer immobilized silane bridged metallocene catalysts for ethylene polymerization, **655**, 167
Silanediyl–transition metal complexes
Some aspects of chemistry of the N→Si chelated aryloxydihydrosilanes R(ArO)SiH_2(R=Ph, ArO) and of the 2,2-diaryloxytrisilane $(Me_3Si)_2Si(OAr)_2${ArO=2,4,6-$[(CH_3)_2NCH_2]_3C_6H_2O$}, **658**, 94
Silanes
Hexa(1-alkynyl)disilanes. Synthesis, structure and 1,1-ethylboration, **656**, 97
Hydrosilylation of alkynes catalyzed by platinum on carbon, **645**, 1
Silyl derivatives of ferrocene with pending indenyl or fluorenyl substituents at silicon, **656**, 71
Silanethione
Some aspects of chemistry of the N→Si chelated aryloxydihydrosilanes R(ArO)SiH_2(R=Ph, ArO) and of the 2,2-diaryloxytrisilane $(Me_3Si)_2Si(OAr)_2${ArO=2,4,6-$[(CH_3)_2NCH_2]_3C_6H_2O$}, **658**, 94
Silanolates
Silanones and metasilicates from negatively charged $\equiv SiO^{(-)}$ and $=SiO_2^{(2-)}$ precursors. Theoretical study, **642**, 163
Silanol polycondensation
Polycondensation and disproportionation of an oligosiloxanol in the presence of a superbase, **660**, 14
Silanols
Polycondensation and disproportionation of an oligosiloxanol in the presence of a superbase, **660**, 14
Silanones and metasilicates from negatively charged $\equiv SiO^{(-)}$ and $=SiO_2^{(2-)}$ precursors. Theoretical study, **642**, 163
Silanones
Silanones and metasilicates from negatively charged $\equiv SiO^{(-)}$ and $=SiO_2^{(2-)}$ precursors. Theoretical study, **642**, 163
Silazane
Hydrosilylation reactions of tetramethyldisilazanes and their derivatives, **655**, 115
Silicenium
Some aspects of chemistry of the N→Si chelated aryloxydihydrosilanes R(ArO)SiH_2(R=Ph, ArO) and of the 2,2-diaryloxytrisilane $(Me_3Si)_2Si(OAr)_2${ArO=2,4,6-$[(CH_3)_2NCH_2]_3C_6H_2O$}, **658**, 94
Silicon
A new approach to photophysical properties control of main group element π-electron compounds based on the coordination number change, **652**, 3
Dihydroxyoligosilanes as novel ligands in coordination chemistry—first synthesis of 2,5-dioxa-3,4-disilatitanacyclopentanes, **662**, 1
Interactions of chloromethyldisilanes with tetrakis(dimethylamino)ethylene (TDAE), formation of $[TDAE]^{\cdot+}$ $[Si_3Me_2Cl_7]^-$, **662**, 14
Preparation, characterization and properties of dipolar 1,2-*N*,*N*-dimethylaminomethylferrocenylsilanes, **654**, 187
Proton catalysis of nucleophilic substitution at pentacoordinate silicon, **655**, 1
Some aspects of chemistry of the N→Si chelated aryloxydihydrosilanes R(ArO)SiH_2(R=Ph, ArO) and of the 2,2-diaryloxytrisilane $(Me_3Si)_2Si(OAr)_2${ArO=2,4,6-$[(CH_3)_2NCH_2]_3C_6H_2O$}, **658**, 94
Some recent advances in the chemistry of silicon and its homologues in low coordination states, **646**, 39
Synthesis of bis(pyrazol-1-yl)methanes with organogermyl and organosilyl groups on the methine carbon and their reaction with $W(CO)_5(THF)$. X-ray crystal structures of $Ph_3GeCHPz_2W(CO)_4$ and $Me_3SiCHPz_2W(CO)_4$ (Pz = 3,5-dimethylpyrazole), **658**, 198
Transformations of organosilanes by Pt(II) complexes with hemilabile P,N-chelating ligands, **646**, 53
Very strong anionic homoaromaticity in (*deloc*-1,3,4)-1-sila-3,4-diboracyclopentane-1-ides, the importance of the energy of the reference system for homoaromatic stabilization energies, **646**, 262
Silicon β effect
2-[(8-Dimethylaminonaphthalen-1-yl)dimethylsilyl]-*N*,*N*,4,4-tetramethyl-1,2,3,3*a*,4,5-hexahydro-4-sila-5,9*b*-ethenobenz[*e*]inde-9-amine. An unexpected by-product from the reaction of 1-lithio-8-dimethylaminonaphthalene with chlorodimethylvinylsilane, **654**, 3
Silicon–lead chalcogenides
Silicon-lead chalcogenides of the types $Me_4Si_2(E)_2PbPh_2$ and $Ph_2Pb(E)_2Si_2Me_2(E)_2PbPh_2$ (E = S, Se) and related compounds containing tin and antimony, **648**, 220
Silicon–silicon bond formation
Synthesis of di- and trisilanes with potentially chelating substituents, **649**, 25
Silicotropic rearrangements
Addition reactions of bis(trimethylsilyl)methyl- and 1-azzallyllithium with cyanoamines into triazines or β-diketiminatolithium compounds, **655**, 89
Silole
Cross-coupling reactions in the chemistry of silole-containing π-conjugated oligomers and polymers, **653**, 223
Synthesis of novel bithiophene derivatives with an organosilanylene bridge, and their applications to electron-transporting materials in EL devices, **642**, 137
Siloles
Reactivity of some poly-1-alkynylsilicon and -tin compounds towards triallylborane—routes to novel heterocycles, **657**, 146
Siloxane
First siloxane tethered paracyclophane, **646**, 167
Multinuclear NMR and X-ray diffraction study of pentacoordinated siloxane structures derived of pyridine diols, **648**, 280

Siloxane bridge
Synthesis and crystal structures of μ-1,3-bis(η^5-tetramethylcyclopentadienyl)-1,1,3,3-tetramethyldisiloxane)[η^2-bis(trimethylsilyl)ethyne]titanium(II) and a doubly tucked-in product of its thermolysis, **658**, 235
Siloxane complex
New complexes with M–Si–O or M–Si–S linkages (M = Fe or Co), **648**, 237
Siloxanes
Preparation of Ti(IV), Zr(IV) and Sn(IV) metal alkyls containing the $(Pr^iO)_3SiCH_2$ fragment, **663**, 256
Siloxanol disproportionation
Polycondensation and disproportionation of an oligosiloxanol in the presence of a superbase, **660**, 14
Siloxides
Cobalt(II) and iron(II) tris(trimethylsilyl)siloxides: synthesis, structure and reactivity, **642**, 20
Silsesquioxanes
Silsesquioxane chemistry. Part 10. Silsesquioxane silanolate complexes of samarium and scandium, **647**, 245
Silver
Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41
Design, synthesis and solid state structural characterisation of a metallacyclophane formed by a diazadioxamacrocycle bearing two pyridines and silver(I) cation, **643-644**, 376
Directing role of anions in the syntheses of the silver–alkynyl cages $[Ag_{14}(C{\equiv}C^tBu)_{12}X][BF_4]$ (X = F, Cl, Br) and silver–alkynyl polymers $[Ag_3(C{\equiv}C^tBu)_2(X)]_n$ (X = Tos, NO_3), **652**, 87
Four- five- and six-co-ordinated pentafluorophenylthallium(III) complexes. Crystal structures of $[Tl(C_6F_5)_3(OPPh_3)]$, $[Tl(C_6F_5)_2Cl(OPPh_3)]_2$ and $[Tl(C_6F_5)_2(OdppmO)_2][Tl(C_6F_5)_2Cl_2]$, **663**, 289
Synthesis, characterization and structural studies of new heterometallic alkynyl complexes of platinum and Group 11 metals with chelating bis(diphenylphosphino)ferrocene ligand, **659**, 107
Silver complex
Synthesis and crystal structure of *N*-heterocyclic carbene complex of silver, **654**, 233
Silver(I)
Homo coupling, disproportionation and cross coupling of alkyl groups. Role of the transition metal catalyst, **653**, 11
Silylamide route
β-SiH agostic bonding in sterically crowded lanthanidocene silylamide complexes, **647**, 236
Silylamino
Synthesis and structure of 2,4,6-tris[tris(dimethylamino)silylamino]borazine: $\{[(CH_3)_2N]_3SiNH\}_3B_3N_3H_3$, **657**, 71
Silylated
A new class of linked-bis(*N*,*N*′-dialkylamidinate) ligand: applications in the synthesis of bimetallic aluminium complexes, **662**, 178
Silylated linker
Palladium cross-coupling reactions on solid support using a new silylated linker, **643-644**, 512
Silylborane
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)iminomethanes via possible generation of (amino)(boryl)carbene species, **643-644**, 508
Silyl complex
Convenient preparation of Li[(η^5-C_5Me_5)M(CO)$_2$] (M = Ru, Fe) by the reaction of (η^5-C_5Me_5)M(CO)$_2$H with *n*-BuLi, **645**, 201
Silyl complexes
Reaction of silylpentacarbonylmanganese with hydride-transfer reagents: reduction of carbonyl ligands accompanied with Si–C C and C–C coupling, **650**, 91
Transformations of organosilanes by Pt(II) complexes with hemilabile P,N-chelating ligands, **646**, 53
Silylene
New complexes with M–Si–O or M–Si–S linkages (M = Fe or Co), **648**, 237
Reactions of methyl(phenyl)silylene with CO and PH_3—the formation of acid–base complexes, **641**, 156
Some aspects of chemistry of the N → Si chelated aryloxydihydrosilanes R(ArO)SiH_2(R=Ph, ArO) and of the 2,2-diaryloxytrisilane $(Me_3Si)_2Si(OAr)_2$\{ArO=2,4,6-$[(CH_3)_2NCH_2]_3C_6H_2O$\}, **658**, 94
The quest for triplet ground state silylenes, **646**, 68
μ-Silylene complexes
Complexation of *N*-heterocyclic silylenes to Pd(0): formation of highly labile homoleptic complexes Pd[Si(^{t}BuNCH$_2$CH$_2$N^{t}Bu)]$_4$ and Pd[Si(^{t}BuNCHCHN^{t}Bu)]$_3$, **649**, 141
Silylene complexes
Syntheses and structures of dimethylamino-bridged bis(silylene)ruthenium and -osmium complexes, **645**, 235
Silylenes
Synthesis of di- and trisilanes with potentially chelating substituents, **649**, 25
Silylium cations
Radiochemical study of the gas phase reaction of nucleogenic diethylsilylium ions with methanol and butanol, **656**, 258
Silyl ligands
Hafnium imido complexes containing silyl ligands, **643-644**, 431
Silyl metal complexes, agostic interaction
A theoretical study of the reaction products created by irradiation of the carbonyl iron silyl complexes Cp(CO)$_2$FeSiH_2Me and Cp(CO)$_2$FeCH_2SiH_3, **648**, 155
Silyl migration
1,2-Azaboretidine formation in the reactions of (boryl)(silyl)iminomethanes via possible generation of (amino)(boryl)carbene species, **643-644**, 508
Silylolefination
Recent advances on the synthetic applications of the dithioacetal functionality, **653**, 209
Silyl substituents
Synthesis and crystal structures of thermally stable titanocenes, **663**, 134
^{29}Si-NMR
Multinuclear NMR and X-ray diffraction study of pentacoordinated siloxane structures derived of pyridine diols, **648**, 280
Sisyls
The stable silylene Si[(NCH$_2^t$Bu)$_2$$C_6H_4$-1,2]: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or [Li\{Si($SiMe_3$)$_3$\}(THF)$_3$] [R = Me, ^{t}Bu or CH($SiMe_3$)$_2$], **651**, 150
The stable silylene Si[(NCH$_2^t$Bu)$_2$$C_6H_4$-1,2]: insertion into Li–C or Li–Si bonds of lithium alkyls LiR or [LiSi($SiMe_3$)$_3$(THF)$_3$] [R = Me, ^{t}Bu or CH($SiMe_3$)$_2$], **643-644**, 272
Size-exclusion chromatography
Synthesis, X-ray absorption spectroscopy and purification of the seleno-bis (*s*-glutathionyl) arsinium anion from selenide, arsenite and glutathione, **650**, 108
Sm(III) Lewis acid
Symmetric and asymmetric samarium alkoxide derivatives of bridging sulfur biphenolate and binaphtholate ligands; synthetic, structural, and catalytic studies, **647**, 205
^{119}Sn MAS-NMR
Observation of inter- and intramolecular C–H···F hydrogen bonding in Gingras' salt: $[n\text{-}Bu_4N]^+[Ph_3SnF_2]^-$, **648**, 204
^{119}Sn-NMR spectroscopy
A novel route for the preparation of dimeric tetraorganodistannoxanes, **659**, 73
S_N2-Si and S_Ni-Si
1-Triflato-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane and 1,3-bis-

triflato-5,7-dimethyl-1,3,5,7-tetrasilaadamantane; synthesis, complexation study and X-ray structure of 1-hydroxy-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane, **658**, 141
Sodium
Cyclopentadienyl, indenyl, and fluorenyl complexes of sodium with 15-crown-5, **649**, 50
Sodium and potassium derivatives of diphenyl(trimethylsilyl)methane, **664**, 182
Sodium acetylides
A general convenient synthesis of conjugated dieneynes, **643-644**, 501
Soil bacteria
Biocatalytic synthesis of optically active oxyfunctionalized building blocks with enzymes, chemoenzymes and microorganisms, **661**, 17
Sol-gel
Organic–inorganic hybrid materials containing metal phosphine complexes: Evidence for preferential *cis* configuration of Pd(II) and Pt(II) complexes within the materials, **643-644**, 453
Sol–gel proccess
Supported organometallic complexes: Part XXX. Hydroformylation of 1-hexene in interphases — the influence of different kinds of inorganic–organic hybrid co-condensation agents on the catalytic activity, **641**, 165
Solid solution
Pd(II) bromide complexes of 1,2-bis(diphenylphosphino)-1,2-dicarba-*closo*-dodecaborane. Crystal structures of $[PdBr_2(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CH_2Cl_2$, $[PdBr_{1.133}Cl_{0.867}(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CH_2Cl_2$ and $[PdBrCl_{0.541}Me_{0.459}(1,2\text{-}(PPh_2)_2\text{-}1,2\text{-}C_2B_{10}H_{10})]\cdot CHCl_3$, **657**, 187
Solid state NMR
High resolution solid state NMR investigation of various boron nitride preceramic polymers, **657**, 75
Solid state NMR spectroscopy
Supported organometallic complexes: Part XXX. Hydroformylation of 1-hexene in interphases — the influence of different kinds of inorganic–organic hybrid co-condensation agents on the catalytic activity, **641**, 165
Solid-state NMR spectroscopy
Octakis[(2,2,6,6-tetramethylpiperidino)methyl]octasilsesquioxane: synthesis and crystal structure analysis of a new aminoorganyl-functionalized octasilsesquioxane, **646**, 200
Solid-state structure
Synthesis and electrochemical behaviour of σ,η^2-acetylide-bridged early–late complexes;: The solid-state structure of $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ti(C{\equiv}CSiMe_3)_2]Pd(PPh_3)$, **664**, 123
The crystal structure of $[Mo(NCS)(CO)_2(\eta^3\text{-}C_3H_5)(NCMe)_2]\cdot MeCN$ and the reactions of $\{Mo(CO)_2(\eta^3\text{-}C_3H_5)^+\}$ containing species with symmetric alkynes, **664**, 176
Solid state structures
Enantiomerically enriched 'carbanions': Studies on the stereochemical course of selective transformations of metal alkyls, **661**, 149
Solvent effects
Specific solvent effect on R_2ZrCl_2 (R = butyl, ethyl) reactivity, a density functional study, **664**, 268
Sonogashira coupling
Studies on stereoselective Sonogashira coupling of 1,1-dibromo-1-alkene, **653**, 141
sp^2-C halide
Development of Pd–Cu catalyzed cross-coupling of terminal acetylenes with sp^2-carbon halides, **653**, 46
Spectra
Electronic coupling in covalently-linked M–M quadruple bonds: $M_2\delta$ to ligand π conjugation, **641**, 15
Spirocyclodimers
Synthesis of 'three-petal' carbocyclic systems based on *s-cis*-diferrocenyltrienes, **649**, 86
Spirophosphorane
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), **643-644**, 441
$S_{RN}1$ reaction, HME reaction
Mechanistic studies on the reactions of trimethylsilanide and trimethylstannylide ions with haloarenes in hexamethylphosphoramide, **656**, 108
Stability
Quantum chemical studies on elementary fragments of three-coordinated methylaluminoxanes, **648**, 49
Stabilization
Electronic reason for the stabilization of osmabenzyne, **658**, 9
Stable phosphinocarbenes
Phosphorus stabilized carbenes: theoretical predictions, **643-644**, 278
Stannatrane
Application of cross-coupling reactions in Merck, **653**, 279
Stannocene
New linked di-germanocenes and di-stannocenes, **651**, 44
Stannylenes
Reactions of organotin(IV) compounds with platinum complexes. Part(III). Reactions of $(R_2Sn)_n$, (R = Me or Ph, $n = 6$; R = Et, $n = 9$) with platinum complexes, **654**, 21
Staudinger reaction
Synthesis of dendrimers with phosphine end groups at each generation, **643-644**, 112
Stephens–Castro reaction
Development of Pd–Cu catalyzed cross-coupling of terminal acetylenes with sp^2-carbon halides, **653**, 46
Stereochemistry
Regio- and stereoselective addition of sterically hindered silylboranes to terminal alkynes, **646**, 179
Stereodivergent synthesis
Ruthenium-catalyzed hydrosilylation of terminal alkynes: stereodivergent synthesis of (*E*)- and (*Z*)-alkenylsilanes, **645**, 192
Stereoselective [4+2]-cycloadditions
Effects of the electronic properties of chiral chelating diphosphines in stereoselective Diels–Alder cycloaddition reactions promoted by their transition metals complexes, **643-644**, 424
Stereoselective reaction
Studies on stereoselective Sonogashira coupling of 1,1-dibromo-1-alkene, **653**, 141
Stereoselective synthesis
The lactone concept—a novel approach to the metal-assisted atroposelective construction of axially chiral biaryl systems, **661**, 31
Transition metal-catalyzed oxidations of bishomoallylic alcohols, **661**, 67
Stereoselectivity
One-electron oxidation of metal enolates and metal phenolates, **661**, 169
Stereoselective hydrostannation of substituted alkynes with trineophyltin hydride, **650**, 173
The synthesis of a hydroazulen-2-one skeleton-determination of the diastereoselectivity of [3+2] cycloaddition of tricarbonyl[(4,5,6,7-η)-2-methyltropone]iron with *E*/*Z*-η^1-(crotyl)Fp, **659**, 43
Stereo selectivity
Synthesis of *cis*-dichloride complexes of Group 6 transition metals bearing alkyne and chalcogen-bridged chelating bis(aryloxo) ligands as catalyst precursors for ring-opening metathesis polymerization, **654**, 74
Synthesis of novel oxo complexes of tungsten and molybdenum with various chalcogen-bridged chelating bis(aryloxo) ligands

and their catalytic behavior for ring-opening metathesis polymerization, **651**, 114
Stereoselectivity
Allylboration of functionalized isoquinolines, **657**, 123
Stereoselectivity Catalysis
Hydrophosphination with cationic primary phosphine iron complexes: synthesis of P-chiral functionalized phosphines, **661**, 95
Sterically hindered
Synthesis and characterization of the sterically hindered iridium(III)–silyl complex: $(Et_3P)_3(H)_2Ir[Si(H)Cl(C_6H_3\text{-}Mes_2\text{-}2,6)]$ and the generation of the cationic iridium(III)-silylene complex: $[(Et_3P)_3(H)_2Ir{=}Si(H)(C_6H_3\text{-}Mes_2\text{-}2,6)][B(C_6F_5)_4]$, **654**, 224
Sterically induced reduction
The expansion of divalent organolanthanide reduction chemistry via new molecular divalent complexes and sterically induced reduction reactivity of trivalent complexes, **647**, 2
Steric crowding
Recent advances in f element reduction chemistry, **652**, 61
Steric effects
Alkoxycarbonyl substituted ruthenium mono(bipyridine) complexes: steric effects of the bipyridine substituents, **654**, 8
Steric effects in alkylalane dioldiates: $[^tBuAl(OC(CH_3)_2CH_2C(CH_3)_2O)]_2$ a new (monoalkyl)alane *O,O′*-chelate complex, **651**, 72
Zirconium bis-indenyl compounds. The influence of substituents on the ethene polymerization behavior of 1- and 2-substituted $(R\text{-}Ind)_2ZrCl_2$/MAO catalysts, **642**, 195
Steric isomerization
Steric isomerization of alkyne–dialkyltungsten complexes with a chelating diaryloxo ligand: crystal structures of C_s- and C_1-$W(\eta^2\text{-}RC{\equiv}CR)[2,2'\text{-}S(4\text{-}Me\text{-}6\text{-}R'C_6H_2O)_2](CH_2SiMe_3)_2$, **664**, 234
Steric promotion of C–H bond activation
Homochiral cyclopalladated complexes of (*S*)-4-*tert*-butyl-2-phenyl-2-oxazoline. X-ray study of (*S*,*S*)-di-μ-chlorobis-{2-[2-(4-*tert*-butyl)oxazolinyl]phenyl-*C*,*N*}dipalladium(II), **654**, 66
(*S*)-4-*tert*-Butyl-2-phenyl-2-oxazoline
Homochiral cyclopalladated complexes of (*S*)-4-*tert*-butyl-2-phenyl-2-oxazoline. X-ray study of (*S*,*S*)-di-μ-chlorobis-{2-[2-(4-*tert*-butyl)oxazolinyl]phenyl-*C*,*N*}dipalladium(II), **654**, 66
Stibine
Ruthenium hydrides bearing $SbPh_3$ and $AsPh_3$ ligands: characterization of the bis(dihydrogen) complexes $[Cp^*Ru(H_2)_2(EPh_3)]^+$ ($Cp^* = C_5Me_5$; E = Sb, As), **663**, 151
Stibines
Synthesis, characterization, and reactivity of half-sandwich Ru(II) complexes containing phosphine, arsine, stibine, and bismutine ligands, **649**, 55
Stille coupling
A new frontier in the metal-catalyzed cross-coupling reaction field. The palladium-promoted metal–carbon bond formation. Scope and mechanism of a new tool in organometallic synthesis, **653**, 177
Stille–Migita
Application of cross-coupling reactions in Merck, **653**, 279
Stille reaction
The intramolecular Stille reaction in some target natural product syntheses, **653**, 261
Strained molecules
Preparation and structures of 1-dimethylamino-2-bis(dimethylamino)- and 1-chloro-2-bis(diethylamino)-1-phospha-2-phosphonium acenaphthene: the first examples of the 1,2-dihydro-1,2-diphospha-acenaphthene ring system, **643–644**, 68
Strain energy
Strain in organometallics: synthesis of rhodium and iridium complexes with a novel rigid tetrachelating phosphine olefin ligand and their redox properties, **641**, 227
s-trans Coordination
Adaptable coordination modes of conjugated 1,3-diene: uniqueness of *s-trans* coordination, **663**, 5
Strontium
Synthesis and characterization of monomeric Ba and Sr complexes with malonate and Lewis base ligands, **648**, 214
Structural characterization
Structural characterization and catalytic activity of the rhodium–carbene complex $Rh(PPh_3)_2(IMes)Cl$ (IMes = bis(1,3-(2,4,6-trimethylphenyl)imidazol-2-ylidene), **658**, 126
Structural systematics
The use of Kitaigorodskii's *Aufbau* principle in the solid-state study of crystalline borane compounds. A preliminary account, **657**, 20
Structure
Synthesis and structure of 2,4,6-tris[tris(dimethylamino)silylamino]borazine: $\{[(CH_3)_2N]_3SiNH\}_3B_3N_3H_3$, **657**, 71
Ytterbium(II) amides and crown ethers: addition versus amide substitution, **647**, 198
Structure–activity
Synthesis, microbiological study and X-ray structural characterisation of a tri-*n*-butylstannyl-2[4(diethylamino)arylazo]benzenecarboxylate, **645**, 33
Structure determination
Synthesis and crystal structure of highly soluble ansa-titano- and zirconocene dichloride complexes $[Me_2Si(\eta^5\text{-}C_5H_2(SiMe_3)_2]_2MCl_2$ (M = Ti, Zr), **649**, 15
Structure elucidation
Quantum chemical studies on elementary fragments of three-coordinated methylaluminoxanes, **648**, 49
Structures
A theoretical study of linear germacyanogen isomers, **659**, 121
Carbonyl derivatives of iron(0) from the reaction of $FeR_2(bipy)_2$ (R = Me, Et) with carbon monoxide, **662**, 137
Cyclic thioether and acyclic thioether–thiolate complexes of pentamethylcyclopentadienyl ruthenium(II, III), **664**, 161
Imido analogs of aluminophosphates: syntheses and X-ray structures of $\{LiAl[OP(N^tBu)_2(NH^tBu)]_2\}_2$ and the mono- and di-methylaluminum complexes of the anions $[OP(N^tBu)_x(NH^tBu)_{3-x}]^{x-}$ ($x = 1, 2$), **646**, 107
Isolation and structural characterization of some stable Pd(II) carboxylate complexes supported by 1,1′-bis(diphenylphosphino) ferrocene (dppf), **658**, 159
Organoaluminum chemistry with low valent aluminum — recent developments, **646**, 4
Preparation and organic transformation reactions of $CpFe(CO)_2SCO\text{-}3\text{-}C_6H_4\text{-}SO_2Cl$, **664**, 228
The reactivity of new (1,5-cyclooctadiene)rhodium acylpyrazolonates towards N- and P-donor ligands: X-ray structures of $[Rh(1,5\text{-}COD)Q^s]$, $[Rh(1,5\text{-}COD)(phen)]Q^s\cdot 0.5H_2O$ (HQ^s = 1-phenyl-3-methyl-4-(2-thenoyl)-pyrazol-5-one) and $[Rh(1,5\text{-}COD)Br]_2$, **651**, 5
Styrene
New complexes of palladium(II) with chelating heterocyclic nitrogen ligands. Characterization and catalytic activity in CO–styrene copolymerization. Crystal structure of $[Pd(bipy)_2][BAr'_4]_2$, $Ar' = [3,5\text{-}(CF_3)_2C_6H_3]$, **664**, 77
Organo-rare-earth-metal initiated living polymerizations of polar and nonpolar monomers, **647**, 128
Substituted cyclopentadienyl
Synthesis, structure and reactivity of *tert*-butyldimethylsilylcyclopentadienyl lanthanide chlorides, including crystal structures of $[(C_5H_4SiMe_2Bu^t)_2Gd(\mu\text{-}Cl)]_2$ and $(C_5H_4SiMe_2Bu^t)_2Er(SBT)(THF)$, **655**, 120

Substituted indenyl complexes
The effect of trimethylsilyl substituents on the ring-slippage of bis-indenyl-molybdenocene derivatives, **648**, 270
Substitution
Proton catalysis of nucleophilic substitution at pentacoordinate silicon, **655**, 1
Substitution kinetics of $Cr(CO)_5(\eta^2$-*Z*-cyclooctene) with tetracyanoethylene, **658**, 274
Synthesis and reactivity of transition metal complexes containing halogenated boryl ligands, **649**, 9
Substitution in nitrosyl complexes
One step substitution of NO and Cl by a metal-S-C-N-ring in $CpCr(NO)_2Cl$: synthesis and molecular structure of $CpCr(NO)$'DMPYS' ($Cp = \pi$-C_5H_5; DMPYS = 4,6-dimethylpyrimidine-2-thiolato), **656**, 177
Sulfide complex
Synthesis of Group 4 transition-metal complexes bearing a secondary phosphine pendant cyclopentadienyl ligand, **648**, 231
Sulfido-tricobalt clusters
Preparations of sulfido-tricobalt clusters containing pyridyl type ligands: insertion of carbon monoxide into cobalt–carbon bond, **655**, 172
Sulfonates
Preparation and organic transformation reactions of $CpFe(CO)_2S$-*C*O–3-C_6H_4–SO_2Cl, **664**, 228
Sulfoxides
Reactivity of the lithium anion of the (*S*,*S*)-bis-*p*-tolylsulfinyl methane. A versatile synthesis of enantiopure alkylidene 1,1-bis-*p*-tolylsulfoxides, **643-644**, 130
Sulfur biphenolate
Symmetric and asymmetric samarium alkoxide derivatives of bridging sulfur biphenolate and binaphtholate ligands; synthetic, structural, and catalytic studies, **647**, 205
Sulfurdiimidato
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Sulfur inversion mechanism
A novel mechanism for the fluxional behaviour of [Pd(η^2-tetramethylethylenetetracarboxylate)(2-methylthiomethylpyridine)], **642**, 58
Support
Porous boron nitride supports obtained from molecular precursors. Influence of the precursor formulation and of the thermal treatment on the properties of the BN ceramic, **657**, 98
Supported complexes
Supported organometallic complexes: Part XXX. Hydroformylation of 1-hexene in interphases — the influence of different kinds of inorganic–organic hybrid co-condensation agents on the catalytic activity, **641**, 165
Supramolecular
The use of Kitaigorodskii's *Aufbau* principle in the solid-state study of crystalline borane compounds. A preliminary account, **657**, 20
Supramolecular assemblies
$C(sp^3)$–H···*O* and $C(sp^2)$–H···O hydrogen bonds in acyclic- and cyclic-organotellurium carboxylates, **649**, 70
Supramolecular associations
Synthesis, spectroscopic characterisation of 1,1,2,3,4,5,6-heptahydro-1,1-di(carboxylato)telluranes and 1,3-dihydro-2λ^4-benzotellurole-2,2-diyl dicarboxylates: Crystal structures of 1,1,2,3,4,5,6-heptahydro-1,1-di(benzoato)tellurane and 1,3-dihydro-2λ^4-benzotellurole-2,2-diyl dibenzoate, **658**, 34
Supramolecular self-assembly
Crystal and molecular structure of (α-naphthyl)TeI_3, **664**, 306
Supramolecular structure
Rhenium tricarbonyl complexes of tris(pyrazolyl)methane ligands: first structural characterization of an isomer pair of tris(pyrazolyl)methane derivatives and the supramolecular structure of the homobimetallic complex {1,4-C_6H_4[$CH_2OCH_2C(pz)_3$]$_2$[Re-$(CO)_3$]$_2$}$(Br)_2$, **658**, 50
Supramolecules
Stable mononuclear and binuclear ruthenium(II) arene complexes with multiple N-donor poly-pyridyl ligands: synthesis, spectroscopic and structural characterization. Single crystal X-ray structure of [(η^6-$C_{10}H_{14}$)RuCl(bppz)]BF_4, **642**, 48
Synthetic, spectral and structural aspects of some mono- and binuclear (homo/hetero) Ru(II) hydrido carbonyl complexes, **648**, 39
Suzuki coupling reactions
Iminophosphines: synthesis, formation of 2,3-dihydro-1*H*-benzo[1,3]azaphosphol-3-ium salts and *N*-(pyridin-2-yl)-2-diphenylphosphinoylaniline, coordination chemistry and applications in platinum group catalyzed Suzuki coupling reactions and hydrosilylations, **650**, 231
Suzuki–Miayara reactions
Palladium-catalyzed cross-coupling reactions of arylboronic acids and 2-I-*p*-carborane, **657**, 267
Suzuki–Miyaura
Application of cross-coupling reactions in Merck, **653**, 279
Palladium-catalyzed C–N and C–C cross-couplings as versatile, new avenues for modifications of purine 2′-deoxynucleosides, **653**, 234
Suzuki–Miyaura coupling reaction
The synthesis and redox behaviors of binuclear ruthenocene derivatives bridged by an aromatic moiety, **655**, 23
Suzuki–Miyaura cross-coupling
Investigations into the Suzuki–Miyaura coupling aiming at multi-kilogram synthesis of E2040 using (*o*-cyanophenyl)boronic esters, **653**, 269
syn–*anti* Isomerization
Iridium complex-catalyzed carbonylation of allylic phosphates, **651**, 137
Synchrotron X-ray diffraction analysis
Macropolyhedral boron-containing cluster chemistry: Models for intermediates en route to globular and discoidal megaloborane assemblies. Structures of [*nido*-$B_{10}H_{12}$(*nido*-B_5H_8)$_2$] and [($CH_2CH_2C_5H_4N$)-*arachno*-$B_{10}H_{10}$(NC_5H_4-*closo*-$C_2B_{10}H_{10}$)] as determined by synchrotron X-ray diffraction analysis, **657**, 256
Syndiotactic polystyrene
Syndiotactic polystyrene with very high molecular weight produced by sterically and electronically modified catalyst, **655**, 186
Syntheses
Organoaluminum chemistry with low valent aluminum — recent developments, **646**, 4
Synthesis
Carbonyl abstraction reactions of Cp*$Mo(PMe_3)_3H$ with CO_2, $(CH_2O)_n$, HCO_2H, and MeOH: the synthesis of Cp*Mo(P-$Me_3)_2$(CO)H and the catalytic decarboxylation of formic acid, **642**, 9
Chiral sulfur diphosphazanes derived from S-$(Ph_2P)_2N$(CHMePh) and its rhodium(I), (III) and iridium(III) complexes. Crystal structures of $Ph_2P(S)N(CHMePh)PPh_2$, $\{Ph_2P(S)\}_2N$(CHMe-Ph) and [(Cp*)MCl{η^2-P,S-$Ph_2PNHP(S)Ph_2$}]BF_4, Cp* = η^5-C_5Me_5; M = Rh, Ir, **651**, 90
Studies on the synthesis and structural characterization of cyclomercurated ferrocenylimines containing heterocyclic ring, **660**, 139
Syntheses and crystal structures of bis(tetrahydrofurfurylindenyl) lanthanocene chlorides ($C_4H_7OCH_2C_9H_6)_2LnCl$ (Ln = Nd, Sm, Dy, Ho, Er, Yb), **658**, 153
Syntheses and structural characterization of transition metal tetrahedral clusters (η^5-RC_5H_4)$(CO)_8MoRu_2H(\mu_3$-S) and [(η^5-

$RC_5H_4)(CO)_4MoRu(\mu_3\text{-}S)]_2$ generated by isolobal reactions, **656**, 228
Synthesis and luminescence properties of novel ferrocene–naphthalimides dyads, **645**, 168
Synthesis and reactivity of organolanthanoid complexes containing N and S ligands, **647**, 180
Synthesis and structure of 1,2,4-triazol-2-ium-5-ylidene complexes of Hg(II), Pd(II), Ni(II), Ni(0), Rh(I) and Ir(I), **664**, 70
Synthesis and structure of 2,4,6-tris[tris(dimethylamino)silylamino]borazine: $\{[(CH_3)_2N]_3SiNH\}_3B_3N_3H_3$, **657**, 71
Synthesis of 2H-1,2-oxaphosphorin 2-oxides, **646**, 153
The directed *ortho* metalation—cross coupling symbiosis. Regioselective methodologies for biaryls and heterobiaryls. Deployment in aromatic and heteroaromatic natural product synthesis, **653**, 150
Synthesis and complexation with super Lewis acids
1-Triflato-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane and 1,3-bis-triflato-5,7-dimethyl-1,3,5,7-tetrasilaadamantane; synthesis, complexation study and X-ray structure of 1-hydroxy-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane, **658**, 141
Synthesis and structure
Synthesis, structure and possible formation pathway of a novel cobalt carbonyl compound with new type B–O bond, $Co(CO)_3(PPh_3)_2BEt_3$, and mixed metal Co–Fe–S cluster with possible nonlinear optical property, $[Et_4N][Co\text{-}Fe_2(CO)_8S(PPh_3)]$, **655**, 233
Synthetic organic chemistry
Catalytically assisted carbon–carbon coupling reaction: a French–Japanese 'cuisine', **653**, 20
Synthon
Synthetic, spectral and structural aspects of some mono- and binuclear (homo/hetero) Ru(II) hydrido carbonyl complexes, **648**, 39
π-Systems
Carbon–silicon hyperconjugation: X-ray structural study of *N*-methyl-4-trimethylsilylmethylpyridinium triflate, **659**, 10

Tamoxifen
The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, **643-644**, 350
Tantalocene hydrides
New insights into the reactivity of the tantalocene hydride Cp'_2TaH_3 ($Cp' = \eta^5\text{-}^t BuC_5H_4$). Synthesis and characterisation of cationic Ta(V) complexes with 0,0 and *S*,*N* chelating ligands, **656**, 139
Tantalum
Dimers of highly π-loaded organoimido d^1 metal radicals of niobium, tantalum, molybdenum, tungsten, and rhenium: the context of the cyclopentadienyl imido ligand analogy, **655**, 96
Imide- and amide-supported Group 5 and 6 metallacarboranes, **657**, 9
Theoretical study of the bonding capabilities of 1,4-diaza-1,3-butadiene and *cis*-1,3-butadiene ligands in cyclopentadienyl tantalum(V) complexes, **655**, 16
$[(t\text{-}Bu)_2P\text{–}OH)]_2PdCl_2$
Highly active, air-stable palladium catalysts for Kumada–Tamao–Corriu cross-coupling reaction of inactivated aryl chlorides with aryl Grignard reagents, **653**, 63
$[(t\text{-}Bu)_2P\text{–}OH)PdCl_2]_2$
Highly active, air-stable palladium catalysts for Kumada–Tamao–Corriu cross-coupling reaction of inactivated aryl chlorides with aryl Grignard reagents, **653**, 63
TCNE
Reactions of $Ru(C{\equiv}CPh)(L_2)Cp^*$ (L_2 = dppm, dppe) with tetracyanoethene: cycloaddition, formation of monodentate dppm and dppmO complexes and migration of CN to ruthenium, **650**, 141
TDAE
Interactions of chloromethyldisilanes with tetrakis(dimethylamino)ethylene (TDAE), formation of $[TDAE]^{\bullet+}$ $[Si_3Me_2Cl_7]^-$, **662**, 14
Tellura
Synthetic, structural and theoretical studies on the new 2,3-dihydro-1,2,4-thia-, selena- and tellura-diphospholes, $P_2EC_2\text{-}Bu^t_2(H)Me$, (E = S, Se, Te) and their $[M(CO)_5]$ complexes (M = Cr, Mo, W), **659**, 84
Tellurate
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Tellurium
Syntheses and structures of $(R_2Bi)_2E$ (E = S, Te) and *cyclo*-$(RSbSe)_2[W(CO)_5]_2$ [$R = CH(SiMe_3)_2$], **664**, 130
Synthesis and molecular structures of dimeric assemblies of telluronium salts derived from $o\text{-}C_6H_4(CH_2TeMe)_2$ and PhMeTe, **642**, 186
Synthesis and structure of the novel mixed Sb/Se and Sb/Te containing iron carbonyl clusters $[Fe_3(\mu_3\text{-}Y)(\mu_3\text{-}SbMes)(CO)_9]$ (Y = Se, Te) and $[Fe_3(\mu_3,\eta^2{:}\eta^1\text{-}SeSbMes)(\mu_3\text{-}SbMes)(CO)_{10}]$, **658**, 204
Synthesis, reactivity and structures of ruthenium carbonyl clusters with telluride and hydride ligands, **659**, 22
Synthesis, spectroscopic characterisation of 1,1,2,3,4,5,6-heptahydro-1,1-di(carboxylato)telluranes and 1,3-dihydro-$2\lambda^4$-benzotellurole-2,2-diyl dicarboxylates: Crystal structures of 1,1,2,3,4,5,6-heptahydro-1,1-di(benzoato)tellurane and 1,3-dihydro-$2\lambda^4$-benzotellurole-2,2-diyl dibenzoate, **658**, 34
TelluriumIV
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Telluroether
Synthesis and complexation of a new facultative tridentate S_2Te donor ligand $MeS(CH_2)_3Te(CH_2)_3SMe$: crystal structures of $[Rh(Cp^*)(S_2Te)][PF_6]_2$ and $[PtCl(S_2Te)]PF_6$, **649**, 214
Telluroethynes
Synthesis, characterization and X-ray structures of bis(arytelluro)ethynes, **654**, 91
Telluronium
Synthesis and molecular structures of dimeric assemblies of telluronium salts derived from $o\text{-}C_6H_4(CH_2TeMe)_2$ and PhMeTe, **642**, 186
Temperature dependent paramagnetism
Iron(II) complexes containing poly(1-pyrazolyl)methane ligands, **655**, 146
Template effect
The reaction of $Co_2(CO)_8$ and $Co_4(CO)_{12}$ with the dipropargylamine $[(HC{\equiv}CCMe_2)_2NMe]$. Synthesis and crystal structure of the complex $Co_4(CO)_{10}(\mu\text{-}CO)[H_2C{=}CC(Me)_2N(Me)C(Me_2)C\text{-}(\mu_4\text{-}C)]$, **656**, 57
Template synthesis
Directing role of anions in the syntheses of the silver–alkynyl cages $[Ag_{14}(C{\equiv}C^tBu)_{12}X][BF_4]$ (X = F, Cl, Br) and silver–alkynyl polymers $[Ag_3(C{\equiv}C^tBu)_2(X)]_n$ (X = Tos, NO_3), **652**, 87
Iminophosphines: synthesis, formation of 2,3-dihydro-1*H*-benzo[1,3]azaphosphol-3-ium salts and *N*-(pyridin-2-yl)-2-diphenylphosphinoylaniline, coordination chemistry and applications in platinum group catalyzed Suzuki coupling reactions and hydrosilylations, **650**, 231
Terdentate ligands
Synthesis, characterization and reactivity of palladium(II) compounds containing terdentate $[Csp^2, N, S]^-$ or $[Csp^3, N, S]^-$ ligands, **650**, 258
Terminal acetylene
Development of Pd–Cu catalyzed cross-coupling of terminal acetylenes with sp^2-carbon halides, **653**, 46

Terminal alkyne
Platinum complex catalyzed reaction of tributyltin cyanide with alkynes, **660**, 173
Termination
Why propene is not polymerized by $(Cp^*_2YH)_2$: reactions of yttrium alkyl complexes with alkenes produce allyl and vinyl yttrium complexes, **663**, 91
Terpenes
Chiral trialkoxysilanols derived from terpene alcohols. Molecular structures of tris([(1*S*)-*endo*]-(−)-bornoxy)silanol and tetrakis((−)-menthoxy)silane, **648**, 188
Dihydromyrcenol carbonylation catalyzed by palladium–tin precursors: selectivity of the reaction drawn by the experimental conditions and the co-reactants, **643-644**, 12
Terphenyl
Unusual structures of lithium terphenyl derivatives, **643-644**, 461
tert-Butoxides
Aspects of non-classical organolanthanide chemistry, **647**, 71
Tertiary phosphine complexes
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, **643-644**, 313
Tertiary phosphines
Cyclometallated compounds of Pd(II): C=N to C=O conversion through acid hydrolysis. Crystal and molecular structures of $[Pd\{4\text{-}(CHO)C_6H_3C(H)=NCy\}(Cl)(PPh_3)_2]$ and $[Pd\{2,4\text{-}(CHO)_2C_6H_3\}(Cl)(PPh_3)_2]$, **659**, 67
One-pot palladium-catalyzed phosphination of aryl iodides with Ph_2PSnR_3, **664**, 223
Tertiary phosphonium salts
Phosphine–boranes incorporating the carborane cluster, **657**, 224
Tethered olefins
The bent metallocene geometries of potassium polyalkyl cyclopentadienyl THF solvates: monosolvated $[(THF)K(\mu\text{-}C_5Me_5)]_n$, disolvated $[(THF)_2K(\mu\text{-}C_5Me_5)]_n$ and the tethered olefin complex $[(THF)K(\mu\text{-}C_5Me_4SiMe_2CH_2CH=CH_2)]_n$, **649**, 252
Tetraanilinopyridinato-diruthenium(III) core
Synthesis and characterization of *trans*-phenylethynylalkynyl adducts on a tetraanilinopyridinato-diruthenium(III) core, **655**, 239
Tetracarbonyls
A new method for assigning the C–O stretching bands in *cis*-disubstituted octahedral metal carbonyl complexes, **660**, 116
Tetracyanoethylene
Substitution kinetics of $Cr(CO)_5(\eta^2\text{-}Z\text{-cyclooctene})$ with tetracyanoethylene, **658**, 274
Tetraethyl ethenylidenebisphosphonate
Michael addition of Grignard reagents to tetraethyl ethenylidenebisphosphonate, **650**, 77
Tetrahedron
Synthesis, reaction and enantiomeric resolution of chiral clusters containing SRuNiM (M = Mo, W) core, **664**, 201
Tetrahydrofurans
Transition metal-catalyzed oxidations of bishomoallylic alcohols, **661**, 67
Tetrahydrofurfurylindenyl
Syntheses and crystal structures of bis(tetrahydrofurfurylindenyl) lanthanocene chlorides $(C_4H_7OCH_2C_9H_6)_2LnCl$ (Ln = Nd, Sm, Dy, Ho, Er, Yb), **658**, 153
Tetramethylcyclopentadienyl
β-SiH agostic bonding in sterically crowded lanthanidocene silylamide complexes, **647**, 236
Tetramethylfulvene
Reactions of the tetramethylfulvene ligand coordinated to rhenium with hydrohalic acids and halogens: synthesis of dicarbonyl complexes with a 'four-legged piano-stool' structure containing mixed-halide ligands, **662**, 130
Tetraorganodistannoxane
A novel route for the preparation of dimeric tetraorganodistannoxanes, **659**, 73
Synthesis, spectroscopic and structural aspects of some tetraorganodistannoxanes with internally functionalized oxime: crystal and molecular structures of $[\{R_2Sn(ON=C(Me)py)\}_2O]_2$ (R = Bu″ and Et) and 2-$NC_5H_4C(Me)$=NOH, **651**, 98
Tetraorganodistannoxanes
Synthesis, spectroscopic and structural aspects of some tetraorganodistannoxanes with internally functionalized oxime. 2. Crystal and molecular structure of $[\{Me_2Sn(ON=C(Me)C_5H_4\text{-}N)\}_2O\}]_2\cdot 2[2\text{-}NC_5H_4(Me)C=NOH]$, **664**, 66
Tetraphenylborate
Nitrile exchange reactions of $[WI(CO)(NCMe)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$; X-ray crystal structures of $[WI(CO)(L)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$ {L = NC^iPr, NC^tBu, $NCCH_2Ph$, 1,2-$C_6H_4(NCCH_2)_2$}, **664**, 37
Tetraphenylcyclopentadienyl
β-SiH agostic bonding in sterically crowded lanthanidocene silylamide complexes, **647**, 236
Tetraphosphine
Reactions of tetraphosphine complex $[Mo\{meso\text{-}o\text{-}C_6H_4(PPhCH_2CH_2PPh_2)_2\}(Ph_2PCH_2CH_2PPh_2)]$ with nitrile, CO, and isocyanide, **658**, 106
Tetraruthenium cluster
Pyrolysis of $[Ru_3(CO)_{10}(dppe)]$: activation of C–H and P–Ph bonds. The crystal structure and dynamical behavior of $[Ru_4(CO)_9(\mu\text{-}CO)\{\mu_4\text{-}\eta^2\text{-}PCH_2CH_2P(C_6H_5)_2\}(\mu_4\text{-}\eta^4\text{-}C_6H_4)]$, **660**, 153
Tetraruthenium clusters
The reaction of $[H_4Ru_4(CO)_{12}]$ with 1-penten-3-yne: dimerization and trimerization through the triple bonds, **649**, 43
1,1,2,2-Tetratbutyldistannanes
Reaction pathways towards 1,1,2,2-tetra^{t}butyldistannanes, **646**, 271
Tetrathiafulvalene
Structural and electrochemical study of metal carbonyl complexes with chelating bis- and tetrakis(diphenylphosphino)tetrathiafulvalenes, **643-644**, 292
Thallium
Four- five- and six-co-ordinated pentafluorophenylthallium(III) complexes. Crystal structures of $[Tl(C_6F_5)_3(OPPh_3)]$, $[Tl(C_6F_5)_2Cl(OPPh_3)]_2$ and $[Tl(C_6F_5)_2(OdppmO)_2][Tl(C_6F_5)_2Cl_2]$, **663**, 289
Synthesis and structural characterisation of the 3,5-di-*tert*-butyl-1,2,4-triphospholyl complexes of monovalent gallium and thallium, $[M(\eta^5\text{-}P_3C_2Bu^t_2)]$, M = Ga, Tl, **646**, 191
Synthesis of 2,4,6-tris(trifluoromethyl)phenyl complexes of gold and thallium, **648**, 1
The synthesis and characterization of 1-formyl-2-acylcyclopentadienylthallium compounds, **642**, 268
Theoretical chemical calculation
Synthesis, structure and possible formation pathway of a novel cobalt carbonyl compound with new type B–O bond, $Co(CO)_3(PPh_3)_2BEt_3$, and mixed metal Co–Fe–S cluster with possible nonlinear optical property, $[Et_4N][Co\text{-}Fe_2(CO)_8S(PPh_3)]$, **655**, 233
Thermochemistry
On the transferability of Ir–I bond enthalpies between $[Ir(\mu\text{-}S^tBu)(I)_2(CO)_2]_2$ and *trans*-$[Ir(X)(I)_2(CO)(PPh_3)_2]$ (X = F, Cl, Br, I) complexes, **662**, 105
Thermolysis
Hafnium imido complexes containing silyl ligands, **643-644**, 431
Macropolyhedral boron-containing cluster chemistry: A novel triple-cluster structural motif. Isolation and characterisation of contiguous twenty-vertex $[(PPh_3)_4ClPd_4B_{16}H_{17}(PPh_3)_2]$, **657**, 262

Reactivity of Me_3M (M = Al, Ga, In) with benzylamine to form the dimers, $[Me_2MN(H)CH_2Ph]_2$, and the hexamers, $[MeAlNCH_2Ph]_6$ and $[MeGaNCH_2Ph]_6$: molecular structures of *trans*-$[Me_2MN(H)CH_2Ph]_2$ and $[MeAlNCH_2Ph]_6$, **649**, 78
Synthesis and crystal structures of μ-1,3-bis(η^5-tetramethylcyclopentadienyl)-1,1,3,3-tetramethyldisiloxane)[η^2-bis(trimethylsilyl)ethyne]titanium(II) and a doubly tucked-in product of its thermolysis, **658**, 235
Synthesis, structure, and reactivity of disilanes containing one neutral [4+2]-coordinate silicon center, **643-644**, 479

Thia
Synthetic, structural and theoretical studies on the new 2,3-dihydro-1,2,4-thia-, selena- and tellura-diphospholes, $P_2EC_2Bu^t_2(H)Me$, (E = S, Se, Te) and their $[M(CO)_5]$ complexes (M = Cr, Mo, W), **659**, 84

Thiaboranes
Chemistry on a metallathiaborane cluster Part 4: reactions of 11-vertex rhodathiaboranes with bidentate phosphines and their subsequent rearrangements, **657**, 40
Macropolyhedral thiaboranes with unusual *arachno* subclusters—a computational investigation, **657**, 273

Thiacrown, thiirane
The catalytic synthesis of thiacrowns from thiiranes by Group VI and VII transition metal carbonyl complexes, **652**, 51

Thiacyclodiyne
Interaction of cyclic thiadiynes with CpCo(COD) — selectivity and reactivity, **641**, 3

Thiadiphosphole
Chemistry and ligating properties of the 1,2,4-thiadiphosphole $P_2SC_2Bu^t_2$, **655**, 7

3-Thiapentane-1,5-dithiolate
Cyclic thioether and acyclic thioether–thiolate complexes of pentamethylcyclopentadienyl ruthenium(II, III), **664**, 161

Thia-siloxane
New complexes with M–Si–O or M–Si–S linkages (M = Fe or Co), **648**, 237

Thiatelluranitrogen-chemistry
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80

Thiazine–thione
Reaction of ruthenium complexes containing heterocyclic thiazine–thione ligand, **660**, 127

1,3-Thiazolidine-2-thione
Synthesis of a novel copper(II) complex and its crystal structure, **650**, 274

Thieno[3,2-*b*]thiophene
Synthesis and redox property of the binuclear Pt(II) complexes bridged by thieno[3,2-*b*]thiophenes, **654**, 56

Thienyl
Preparation, characterization, and reactivities of thienyl nickel complexes bearing indenyl ligands, **660**, 98

Thioaldehydes
Stereoselective addition reactions of ruthenium thioaldehyde complexes, **661**, 129

Thiocarbene complexes
Acetonitrile activation in di-iron μ-carbyne complexes: synthesis and structure of the cyanomethyl complex $[Fe_2(\mu\text{-}CNMe_2)(\mu\text{-}CO)(CO)(CH_2CN)(Cp)_2]$, **649**, 64

Thiocarbonyl
Substitution reactions of $[\{Co(\eta^5\text{-}C_5H_5)\}_2\{Fe(CO)_2(PPh_3)\}(\mu_3\text{-}S)(\mu_3\text{-}CS)]$, **651**, 60

Thiocarboxylate
Preparation and organic transformation reactions of $CpFe(CO)_2SCO\text{-}3\text{-}C_6H_4\text{-}SO_2Cl$, **664**, 228

Thiocarbyne
Dithiocarbamate derivatives of μ-thiocarbyne complexes: synthesis and X-ray molecular structure of $[Fe_2(\mu\text{-}CS)(\mu\text{-}CSMe)(\mu\text{-}S_2CNMe_2)Cp_2]$, **659**, 15

Thioether
Synthesis and complexation of a new facultative tridentate S_2Te donor ligand $MeS(CH_2)_3Te(CH_2)_3SMe$: crystal structures of $[Rh(Cp^*)(S_2Te)][PF_6]_2$ and $[PtCl(S_2Te)]PF_6$, **649**, 214

Thioether ligands
Dimethylplatinum(II) and tetramethylplatinum(IV) complexes of 1-methyl-(2-alkylthiomethyl)-1*H*-benzimidazoles: experimental and DFT-calculated structures and NMR spectra, **655**, 218

Thiolate complexes
Hydrogen-bonded networks: (phosphine)gold(I) 4-amino-2-pyrimidine-thiolates, **643-644**, 313

Thiolates
Synthesis and X-ray structures of hydridotris(1-pyrazolyl)borate carbonyl complexes of ruthenium, **648**, 193
Synthesis of Group 10 polyfluorothiolate mono- and bi-nuclear complexes. Crystal structures of $[Ni(SC_6HF_4)_2(dppe)]$, $[(dppe)Ni(\mu\text{-}SC_6HF_4)_2Pd(C_6F_5)_2]$ and $[(dppe)Ni(\mu\text{-}SC_6F_5)_2Pd(C_6F_5)_2]$, **663**, 98

Thiolate–thioether
Cyclic thioether and acyclic thioether–thiolate complexes of pentamethylcyclopentadienyl ruthenium(II, III), **664**, 161

Thiolato complexes of chromium
One step substitution of NO and Cl by a metal-S-C-N-ring in $CpCr(NO)_2Cl$: synthesis and molecular structure of $CpCr(NO)$'DMPYS' (Cp = π-C_5H_5; DMPYS = 4,6-dimethylpyrimidine-2-thiolato), **656**, 177

Thiophenes-bridging
Synthesis and redox property of the binuclear Pt(II) complexes bridged by thieno[3,2-*b*]thiophenes, **654**, 56

Thiophenophane
Interaction of cyclic thiadiynes with CpCo(COD) — selectivity and reactivity, **641**, 3

Thiophosphates
A general convenient synthesis of conjugated dieneynes, **643-644**, 501

Thiophosphine
Phosphorus–hydrogen bond cleavage on a Ph_2PH-substituted μ_3-thioxo dicobalt–iron cluster as a route to bridging phosphido and thiophosphine ligands, **642**, 228

Thiophosphinomethane
Phosphorus–hydrogen bond cleavage on a Ph_2PH-substituted μ_3-thioxo dicobalt–iron cluster as a route to bridging phosphido and thiophosphine ligands, **642**, 228

Thiopyranes
Stereoselective addition reactions of ruthenium thioaldehyde complexes, **661**, 129

Thiosemicarbazone
Reaction of bromopentacarbonylrhenium(I) with ferrocenylcarbaldehyde thiosemicarbazones: the first X-ray diffraction studies of metal carbonyl complexes containing bidentate thiosemicarbazone ligands, **656**, 1

Thioxanthate
Syntheses, X-ray structures, and reactions of ruthenium carbonyl complexes containing 1,1-dithiolates, **650**, 37

Three-membered ring
Synthesis and structure of the first pentacoordinate thiasiliranides, **643-644**, 504

Three-membered rings
Structural properties of azaphosphirane and its $W(CO)_5$ complex. A density functional study, **643-644**, 369

Through-space coupling
Structural and dynamic studies in solution of anionic dinuclear azolato-bridged palladium(II) complexes, **663**, 108

Tin
Alkylderivatives of Stanna-*closo*-dodecaborate, **664**, 116

η^1-Alkynylplatinum(II) complexes with cycloocta-1,5-diene and tri(1-cyclohepta-2,4,6-trienyl)phosphane ligands, **641**, 173

A novel route for the preparation of dimeric tetraorganodistannoxanes, **659**, 73

Coordination chemistry of tin: Part III. The crystal structure and thermal behavior of dipotassium dimethyl-tetrafluoro-stannate dihydrate, $K_2[(CH_3)_2SnF_4]\cdot 2H_2O$, **649**, 147

From bis(silylamino)tin dichlorides via di(1-alkynyl)-bis(silylamino)tin to new heterocycles by 1,1-organoboration, **649**, 232

New synthetic approach and structural characterization of the chloroalkylstannanes $(Cl-CH_2)_n\ SnCl_{4-n}$ $(n = 2, 4)$ and the hydrolysis product $[(ClCH_2)_2Sn(Cl)-O-Sn(Cl)(CH_2Cl)_2]_2$, **646**, 138

Silicon-lead chalcogenides of the types $Me_4Si_2(E)_2PbPh_2$ and $Ph_2Pb(E)_2Si_2Me_2(E)_2PbPh_2$ (E = S, Se) and related compounds containing tin and antimony, **648**, 220

Some recent advances in the chemistry of silicon and its homologues in low coordination states, **646**, 39

Tin alkyls

Preparation of Ti(IV), Zr(IV) and Sn(IV) metal alkyls containing the $(Pr^iO)_3SiCH_2$ fragment, **663**, 256

Tin and compounds

A historical note of the Stille reaction, **653**, 50

Tin complexes

Synthesis and crystal structures of new complexes of di- and tribenzyltin *N*-ethyl and *N*-benzyl-2-amino cyclopent-1-ene-1-carbodithioates, **645**, 105

Tin(IV)

Dimeric dithiocarbamates of stannolane. An example of the presence of secondary bonds in the formation of an inorganic ring. Molecular and crystal structure of 2-*n*butyl-2-(dimethyldithiocarbamate)-1,3,2-oxathiastannolane and 2-*n*butyl-2-(piperidyldithiocarbamate)-1,3,2-oxathiastannolane, **654**, 51

Tin organyls

Mechanisms of Sn-to-Zr cyclopentadienyl transfer in the formation of Me_2Si-bridged zirconocenes from sila-stanna-tetrahydro-s-indacenes, **663**, 58

Titanacycles

Dihydroxyoligosilanes as novel ligands in coordination chemistry—first synthesis of 2,5-dioxa-3,4-disilatitanacyclopentanes, **662**, 1

Titanacyclopentadienes

Novel titana-2,4-cyclopentadienes by 1,1-alkylboration, **649**, 225

Titanaheterocyclic complex

Synthesis and characterization of Cp_2Ti-containing organometallics via in situ oxidative-addition of 'Cp_2Ti' intermediate. Crystal structures of $(1\text{-}C_{10}H_7S)_2TiCp_2$, $[(\eta^5\text{-}C_5H_5)Fe(\eta^5\text{-}C_5H_4CH_2S)]_2TiCp_2$ and $[\eta^2\text{-}OC(Ph)=C(Ph)O]TiCp_2$, **648**, 119

Titanium

A neutron diffraction study of $Cp_2Ti\{(\mu\text{-}H)_2BC_8H_{14}\}$, **654**, 216

Bi- and oligometallic early and late transition metal complexes based on alkynyl-titanocenes and related species spanned by carbon rich π-systems, **641**, 41

C_2-Bridged sandwich and half-sandwich entities with Ti(IV) and Cr(0) centers, **641**, 62

Dialkyl titanium complexes that contain a sulfur-linked bis(phenolato) ligand: The structure of an olefin polymerization catalyst precursor, **663**, 158

Dihydroxyoligosilanes as novel ligands in coordination chemistry—first synthesis of 2,5-dioxa-3,4-disilatitanacyclopentanes, **662**, 1

Hydrazonide titanium derivatives: Synthesis, characterization and catalytic activity in olefin polymerization. Molecular structure of $[Ti(\eta^5\text{-}C_5H_4SiMe_3)Cl(\mu\text{-}N_2CPh_2)]_2$, **663**, 173

Niobium, titanium, zirconium and hafnium complexes incorporating germanium bridged *ansa* ligands. X-Ray crystal structures of $[Zr\{Me_2Ge(\eta^5\text{-}C_5Me_4)_2\}Cl_2]$ and $[M\{Me_2Ge(\eta^5\text{-}C_5Me_4)(\eta^5\text{-}C_5H_4)\}Cl_2]$ (M = Zr, Hf), **656**, 129

Novel titana-2,4-cyclopentadienes by 1,1-alkylboration, **649**, 225

Solid-state structures of persubstituted titanocene chlorides bridged with long aliphatic *ansa*-chains, **642**, 148

Syndiotactic polystyrene with very high molecular weight produced by sterically and electronically modified catalyst, **655**, 186

Syntheses and properties of some *exo*,*exo*-bis(isodicyclopentadienyl)titanium low-valent complexes, **656**, 81

Synthesis and crystal structure of highly soluble ansa-titano- and zirconocene dichloride complexes $[Me_2Si(\eta^5\text{-}C_5H_2(SiMe_3)_2]_2MCl_2$ (M = Ti, Zr), **649**, 15

Synthesis and crystal structures of μ-1,3-bis(η^5-tetramethylcyclopentadienyl)-1,1,3,3-tetramethyldisiloxane)[η^2-bis(trimethylsilyl)ethyne]titanium(II) and a doubly tucked-in product of its thermolysis, **658**, 235

Synthesis and crystal structures of thermally stable titanocenes, **663**, 134

Synthesis and electrochemical behaviour of σ,η^2-acetylide-bridged early–late complexes;: The solid-state structure of $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ti(C{\equiv}CSiMe_3)_2]Pd(PPh_3)$, **664**, 123

Synthesis, structure and polymerization catalytic properties of doubly bridged bis(cyclopentadienyl) dinuclear titanium and zirconium complexes, **645**, 212

Titanium alkyls

Preparation of Ti(IV), Zr(IV) and Sn(IV) metal alkyls containing the $(Pr^iO)_3SiCH_2$ fragment, **663**, 256

Titanium β-diketonato complexes

On the mechanism of olefin polymerisation with titanium β-diketonato complexes. A model density functional study, **648**, 126

Titanocen

The first titanocenyl dichloride moiety vectorised by a selective estrogen receptor modulator (SERM). Synthesis and preliminary biochemical behaviour, **643-644**, 350

Titanocene

Solid-state structures of persubstituted titanocene chlorides bridged with long aliphatic *ansa*-chains, **642**, 148

Synthesis, structures and polymerization catalytic properties of germyl-bridged bis(cyclopentadienyl) metallocenes, **645**, 262

Ti–Ru bimetallic complexes: catalysts for ring-closing metathesis, **643-644**, 231

Titanocene(II) and zirconocene(II) complexes

Bis(η^5-cyclopentadienyl)- and bis(η^5-indenyl)metallacycles of titanium and zirconium from methylenecyclopropanes by oxidative coupling, **656**, 288

Titanocenes

Synthesis and crystal structures of thermally stable titanocenes, **663**, 134

Titanoxacycle

Intramolecular cyclization of benzyl-substituted cyclopentadienyl titanium dichlorides promoted by boron tribromide, **645**, 59

Topology

Chemical applications of topology and group theory. Part 36. Deltahedral and fused deltahedral organometallic gallium and indium clusters, **646**, 146

Toxicity

Synthesis, molecular structure and biological activity of bromobenzylgermatranes, **659**, 165

Transannulation

$P(MeNMCH_2CH_2)_3N$: an effective catalyst for trimethylsilycyanation of aldehydes and ketones, **646**, 161

Transfer hydrogenation

Transition metal hydrides as active intermediates in hydrogen transfer reactions, **652**, 105

trans Influence
The metal–carbon bond in vinylidene, carbonyl, isocyanide and ethylene complexes, **661**, 181
Transition metal
Cp^*GaCl_2 and Cp^*_2GaCl ($Cp^* = \eta^1$-C_5Me_5) as starting materials for novel Group 13 element complexes, **646**, 247
Organic–inorganic hybrid materials containing metal phosphine complexes: Evidence for preferential *cis* configuration of Pd(II) and Pt(II) complexes within the materials, **643-644**, 453
Transition metal carbonyl complexes
A comparison of the ligating properties of the mixed P/O- and P/S-donor ligands $Ph_2P(CH_2)_2O(CH_2)_2O(CH_2)_2PPh_2$ and $Ph_2P(CH_2)_2S(CH_2)_2S(CH_2)_2PPh_2$ with Group 6 and 7 carbonyls, **655**, 55
Transition metal catalysis
Transition metal-catalyzed oxidations of bishomoallylic alcohols, **661**, 67
Transition metal catalyst
Synthesis, structure, and reactivity of disilanes containing one neutral [4+2]-coordinate silicon center, **643-644**, 479
Transition-metal-complex catalyst
Platinum complex catalyzed reaction of tributyltin cyanide with alkynes, **660**, 173
Transition metal complexes
Synthesis, coordination and reactivity of 2-(trimethylsiloxymethyl)phenyl- and 2-(hydroxymethyl)phenyl isocyanides, **662**, 70
Transition metal complexes with polydentate amido ligands: novel structural building blocks and chemical reagents, **661**, 85
Transition metals
Catalytic reduction of acetophenone with transition metal systems containing chiral bis(oxazolines), **659**, 186
Cobalt(II) and iron(II) tris(trimethylsilyl)siloxides: synthesis, structure and reactivity, **642**, 20
Homogeneously catalysed isomerisation of allylic alcohols to carbonyl compounds, **650**, 1
Iron(II) complexes containing poly(1-pyrazolyl)methane ligands, **655**, 146
Reactivity of electrophilic terminal phosphinidene complexes toward phosphorus ylides, **650**, 57
Selective reactions of transition-metal-generated radicals, **661**, 159
Transmetalation
How I came across the silicon-based cross-coupling reaction, **653**, 58
Mechanisms of Sn-to-Zr cyclopentadienyl transfer in the formation of Me_2Si-bridged zirconocenes from sila-stanna-tetrahydro-s-indacenes, **663**, 58
Transmetallation
Discovery of the cross-coupling reaction between Grignard reagents and $C(sp^2)$ halides catalyzed by nickel–phosphine complexes, **653**, 23
Transmetallation reactions
Tin–magnesium transmetallation reactions, **655**, 111
trans-phenylethynylalkynyl adducts
Synthesis and characterization of *trans*-phenylethynylalkynyl adducts on a tetraanilinopyridinato-diruthenium(III) core, **655**, 239
Transphobia
Mono- and di-nuclear complexes of *ortho*-palladated and -platinated 4,4′-dimethylazobenzene with bis(diphenylphosphino)methane. More data on *transphobia*, **663**, 164
Trialkoxysilanols
Chiral trialkoxysilanols derived from terpene alcohols. Molecular structures of tris([(1*S*)-*endo*]-(−)-bornoxy)silanol and tetrakis((−)-menthoxy)silane, **648**, 188
Trialkylamines
Ruthenium-catalyzed reductive cyclization of nitroarenes with trialkylamines leading to quinolines, **650**, 65
Trialkylantimony(V)
Triorganoantimony(V) complexes with internally functionallized oximes: synthetic, spectroscopic and structural aspects of $[R_3Sb(Br)L]$, $[R_3Sb(OH)L]$ and $[R_3SbL_2]$, crystal and molecular structures of $[Me_3Sb\{ON{=}C(Me)C_4H_3O\}_2]$, $[Me_3Sb\{ON{=}C(Me)C_4H_3S\}_2]$, $2\text{-}OC_4H_3C(Me){=}NOH$ and $2\text{-}SC_4H_3C(Me){=}NOH$, **645**, 118
Triazines
Addition reactions of bis(trimethylsilyl)methyl- and 1-azzallyllithium with cyanoamines into triazines or β-diketiminatolithium compounds, **655**, 89
1,2,4-Triazole-5-ylidene
A hexacarbene complex derived from 1,1′-methylenebis(4-butyl-1*H*-1,2,4-triazolium) diiodide. Synthesis, characterization and catalytic activity, **660**, 50
1,2,4-Triazol-2-ium-5-ylidene complexes
Synthesis and structure of 1,2,4-triazol-2-ium-5-ylidene complexes of Hg(II), Pd(II), Ni(II), Ni(0), Rh(I) and Ir(I), **664**, 70
Tributyltin analogs
Synthesis, microbiological study and X-ray structural characterisation of a tri-*n*-butylstannyl-2[4(diethylamino)arylazo]benzenecarboxylate, **645**, 33
Tributyltin cyanide
Platinum complex catalyzed reaction of tributyltin cyanide with alkynes, **660**, 173
Tricarbonylchromium
Planar chiral (η^6-arene)tricarbonylchromium complexes derived from mandelic acid, **654**, 140
Tricarbonyl chromium complexes
Chromium tricarbonyl complexes with biphenylene as η^6 ligand: synthesis, structure, dynamic behaviour in solid state and thermal η^6,η^6-haptotropic rearrangements. Experimental (NMR) and theoretical (DFT) studies, **656**, 27
Metal π complexes of benzene derivatives: Part 56. (η^6-Fluoranthene)(tricarbonyl)chromium: isomerism and haptotropic equilibration, **641**, 208
Tricarbonyl(tropone)iron complexes
Addition of organolithium compounds to tricarbonyl(tropone)iron complexes: experimental and structural studies, **659**, 176
Trications
Generation of $[1,2\text{-}(CH_2)_2C_5Me_3MC_5Me_4CH_2\text{-}1']^{3+}$ (M = Ru, Os) trications and determination of their structures by comparing NMR-spectra with density-functional method calculations, **645**, 87
Tricyclo[8.5.0.0^{3,9}]pentadeca-3,5,7,11,13-pentaene-2-one
[8+2] Cycloaddition of 8-oxoheptafulvene with cycloheptatriene-$Fe(CO)_3$: synthesis of tricarbonyl[(2,3,4,5-η)-11-acetoxy-1*H*-cyclohept[*a*]azulene]iron, **642**, 80
Tridentate cyclopentadienyl ligand
A new half-sandwich Yb(II) complex with the tridentate cyclopentadienyl ligand $[C_5H_4CH_2CH(O)CH_2OBu^n]^{2-}$: synthesis, self-assembly of a tetranuclear cubane-like framework $\{[(\eta^5\text{-}C_5H_4)CH_2CH(\mu^3{:}\eta^1\text{-}O)CH_2OBu^n]Yb\}_4$ and oxidative alkylation by Me_2Hg to the Yb(III) derivative $[(\eta^5\text{-}C_5H_4)CH_2CH(\eta^1\text{-}O)CH_2OBu^n]YbMe(THF)$, **647**, 94
Triethanolamine
Syndiotactic polystyrene with very high molecular weight produced by sterically and electronically modified catalyst, **655**, 186
3-(Triethylgermyl)-2-propynal
Regioselective addition of secondary phosphine oxides to 3-(trialkylsilyl)- and 3-(trialkylgermyl)-2-propynals, **659**, 172
Triflate
Preparation, characterization, and reactivities of thienyl nickel complexes bearing indenyl ligands, **660**, 98

1-Triflato-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane
1-Triflato-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane and 1,3-bis-triflato-5,7-dimethyl-1,3,5,7-tetrasilaadamantane; synthesis, complexation study and X-ray structure of 1-hydroxy-3,5,7-trimethyl-1,3,5,7-tetrasilaadamantane, **658**, 141
Trifluoroacetate
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Trifluoromethylsulfonate
Acyclic and heterocyclic tellurathianitrogen compounds: a review on recent publications, **646**, 80
Trigonal twist process
Investigations on the trigonal twist process in the pseudooctahedral complexes $[MX(CO)_2(P–P)(\eta^3\text{-}R)]$ (M = Mo or W; X = halide or pseudohalide; P–P = bidentate P-donor ligand; R = cycloheptatrienyl, cyclohexenyl or cyclooctenyl), **645**, 218
(2,4,6-Triisopropylphenyl) methyl ketone
The factors controlling the reaction of (2,4,6-triisopropylphenyl) methyl ketone with Ph_3Al and structure of $[Ph_2AlO(2,4,6\text{-tri-}^{i}Pr\text{-}C_6H_2)C{=}CH_2]_2$, **664**, 136
2,4,6-Trimercaptotriazine
Organomercury derivatives of the 2,4,6-trimercaptotriazine (H_3TMT). X-ray crystal structure of $(HgMe)_3(TMT)$, **645**, 101
Trimeric diphenyltin chalcogenides
Molecular structures of trimeric diphenyltin chalcogenides, $(Ph_2SnE)_3$, E = S, Se, Te, **660**, 43
Trimethylaluminum
Reactivity of Me_3M (M = Al, Ga, In) with benzylamine to form the dimers, $[Me_2MN(H)CH_2Ph]_2$, and the hexamers, $[MeAlNCH_2Ph]_6$ and $[MeGaNCH_2Ph]_6$: molecular structures of *trans*-$[Me_2MN(H)CH_2Ph]_2$ and $[MeAlNCH_2Ph]_6$, **649**, 78
Trimethylchlorosilane
The phosphorofluoroamidite approach to mixed phosphites, **643-644**, 490
Trimethylgallium
Reactivity of Me_3M (M = Al, Ga, In) with benzylamine to form the dimers, $[Me_2MN(H)CH_2Ph]_2$, and the hexamers, $[MeAlNCH_2Ph]_6$ and $[MeGaNCH_2Ph]_6$: molecular structures of *trans*-$[Me_2MN(H)CH_2Ph]_2$ and $[MeAlNCH_2Ph]_6$, **649**, 78
Trimethylindium
Reactivity of Me_3M (M = Al, Ga, In) with benzylamine to form the dimers, $[Me_2MN(H)CH_2Ph]_2$, and the hexamers, $[MeAlNCH_2Ph]_6$ and $[MeGaNCH_2Ph]_6$: molecular structures of *trans*-$[Me_2MN(H)CH_2Ph]_2$ and $[MeAlNCH_2Ph]_6$, **649**, 78
Trimethylphosphine
The syntheses and structures of coordinatively unsaturated aryloxy-hydride complexes of molybdenum, $Mo(PMe_3)_4(OAr)H$: reversible C–H bond activation and comparison with their tungsten analogues, **652**, 37
Trimethylsilanide ions
Mechanistic studies on the reactions of trimethylsilanide and trimethylstannylide ions with haloarenes in hexamethylphosphoramide, **656**, 108
Trimethylsilyl butenoates
Direct synthesis of unsaturated β-amino acids, **662**, 172
Trimethylsilyl group
The effect of trimethylsilyl substituents on the ring-slippage of bis-indenyl-molybdenocene derivatives, **648**, 270
Trimethylsilylisodicyclopentadienyl ligand
Syntheses and properties of some *exo,exo*-bis(isodicyclopentadienyl)titanium low-valent complexes, **656**, 81
3-(Trimethylsilyl)-2-propynal
Regioselective addition of secondary phosphine oxides to 3-(trialkylsilyl)- and 3-(trialkylgermyl)-2-propynals, **659**, 172
Trimethylstannylide ions
Mechanistic studies on the reactions of trimethylsilanide and trimethylstannylide ions with haloarenes in hexamethylphosphoramide, **656**, 108
Trinuclear
Salen-supported dinuclear and trinuclear boron compounds, **654**, 36
Triorgano stannyl
Synthesis, microbiological study and X-ray structural characterisation of a tri-*n*-butylstannyl-2[4(diethylamino)arylazo]benzenecarboxylate, **645**, 33
Triorganotin complexes
Organotin(IV) derivatives of novel β-diketones: Part V. Synthesis and characterization of di- and triorganotin(IV) derivatives of 4-acyl-5-pyrazolones modified in position 3 of the pyrazole. Crystal structure of (1,3-diphenyl-4-benzoyl-pyrazolon-5-ato)triphenyltin(IV), **645**, 134
Tri-phenylaluminium
The factors controlling the reaction of (2,4,6-triisopropylphenyl) methyl ketone with Ph_3Al and structure of $[Ph_2AlO(2,4,6\text{-tri-}^{i}Pr\text{-}C_6H_2)C{=}CH_2]_2$, **664**, 136
Triphenylmethyl cation
The reaction of $Cp^*_2ZrMe_2$ with $[CPh_3][B(C_6F_5)_4]$: triphenylethane does *not* form η^n-arene complexes with $[Cp^*_2ZrMe]^+$, **654**, 221
Triphos
Tripodal triphos $\{MeC(CH_2PPh_2)_3\}$ complexes of molybdenum(II) and tungsten(II). Reactions of $[MI_2(CO)_3\{MeC(CH_2PPh_2)_3\text{-}P,P'\}]$ (M = Mo or W) with molybdenum(II) and tungsten(II) complexes, **648**, 99
Triphosphole
The first 2,3-dihydro-1*H*-[1,2,4] triphosphole, **650**, 198
Triphospholyl
A dimeric gold(I) triphospholyl complex, **643-644**, 357
Triphospholyl ligands
Synthesis and structural characterisation of the 3,5-di-*tert*-butyl-1,2,4-triphospholyl complexes of monovalent gallium and thallium, $[M(\eta^5 - P_3C_2Bu^t_2)]$, M = Ga, Tl, **646**, 191
Triple bonds
Synthesis of alkaline earth metal bis(2-phosphaethynolates), **643-644**, 189
The reaction of $[H_4Ru_4(CO)_{12}]$ with 1-penten-3-yne: dimerization and trimerization through the triple bonds, **649**, 43
Triple cluster fusion
Macropolyhedral boron-containing cluster chemistry: Models for intermediates en route to globular and discoidal megaloborane assemblies. Structures of $[nido\text{-}B_{10}H_{12}(nido\text{-}B_5H_8)_2]$ and $[(CH_2CH_2C_5H_4N)\text{-}arachno\text{-}B_{10}H_{10}(NC_5H_4\text{-}closo\text{-}C_2B_{10}H_{10})]$ as determined by synchrotron X-ray diffraction analysis, **657**, 256
Triple-decker complexes
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136
Triplet ground state
The quest for triplet ground state silylenes, **646**, 68
Tripodal ligand
Tripodal triphos $\{MeC(CH_2PPh_2)_3\}$ complexes of molybdenum(II) and tungsten(II). Reactions of $[MI_2(CO)_3\{MeC(CH_2PPh_2)_3\text{-}P,P'\}]$ (M = Mo or W) with molybdenum(II) and tungsten(II) complexes, **648**, 99
Tripodal ligands
Alkynylcarbyne complexes containing various tri- and bidentate ligands such as cyclopentadienide, tris(pyrazolyl)borate, bis(pyrazolyl)acetate and tmeda: synthesis and spectroscopic properties, **641**, 134
tris(Boronate) ester
Rhodium(I) catalysed diboration of (*E*)-styrylboronate esters: molecular structures of (*E*)-*p*-MeO–C_6H_4–CH=CH–$B(1,2\text{-}O_2C_6H_4)$ and *p*-MeO–C_6H_4–$CH_2C\{B(1,2\text{-}O_2C_6H_4)\}_3$, **652**, 77

Tris(hydridosilylethyl)boranes
Dehydrocoupling of tris(hydridosilylethyl)boranes and cyanamide: a novel access to boron-containing polysilylcarbodiimides, **659**, 29
Tris(*N*-pyrrolyl)phosphine complex
Tris(*N*-pyrrolyl)phosphine complexes of osmium(II) and osmium(0), **643-644**, 168
tris(1-Pyrazolyl)borate ligands
Applications of boron–nitrogen and boron–phosphorus adducts in organometallic chemistry, **652**, 11
Tris(pyrazolyl)methane ligands
Rhenium tricarbonyl complexes of tris(pyrazolyl)methane ligands: first structural characterization of an isomer pair of tris(pyrazolyl)methane derivatives and the supramolecular structure of the homobimetallic complex $\{1,4\text{-}C_6H_4[CH_2OCH_2C(pz)_3]_2[Re(CO)_3]_2\}(Br)_2$, **658**, 50
Trithiocarbonate
Reactions of cyclomanganated complexes with carbon disulfide: routes to η^2-aryldithiocarboxylate-$Mn(CO)_4$ complexes and to the trithiocarbonate complex $(\mu_3\text{-}CS_3)_2Mn_4(CO)_{16}$, **664**, 288
Tungsten
Alkynylcarbyne complexes containing various tri- and bidentate ligands such as cyclopentadienide, tris(pyrazolyl)borate, bis(pyrazolyl)acetate and tmeda: synthesis and spectroscopic properties, **641**, 134
Catalytic and selective ring expansion reactions of *o*-phenyl-substituted 2*H*-azaphosphirene tungsten complexes, **643-644**, 253
Convenient access to an alkenyl(biscarbene)-bridged heterobinuclear (Ru–W) complex. X-ray structure of $[(\eta^6\text{-}C_6Me_4H_2)Ru{=}C(OMe)(CH{=}CHC_6H_4CH{=}CH{-}CO_2Me)(Cl)(Me)(Cl)(PMe_3)][PF_6]$, **643-644**, 498
Dimers of highly π-loaded organoimido d^1 metal radicals of niobium, tantalum, molybdenum, tungsten, and rhenium: the context of the cyclopentadienyl imido ligand analogy, **655**, 96
Fluxional behavior of chromium and tungsten complexes of monodentate bis(trimethylphosphine)diborane(4), $[M(CO)_5(\eta^1\text{-}B_2H_4{\cdot}2PMe_3)]$ (M = Cr, W): A model case for alkane–metal complexes, **659**, 102
Gas-phase electronic absorption spectra of metallocene dihydrides $M(\eta^5\text{-}C_5H_5)_2H_2$ (M = Mo, W), **664**, 106
Mixed-metal cluster chemistry: Part 20. Syntheses, crystal structures and electrochemical studies of $W_2Ir_2(\mu\text{-}L)(CO)_8(\eta^5\text{-}C_5H_4Me)_2$ (L = dppe, dppf), **650**, 133
Raman and infrared spectra and pressure tuning Raman and infrared spectra of multinuclear metal carbyne complexes, **648**, 93
Rational synthesis of tricobalt-molybdenum and -tungsten butterfly clusters with alkyne ligands, **659**, 142
Synthesis and characterization of Group 6 transition-metal [70]fullerene derivatives containing dppb ligands. Crystal structure of *fac*-$Mo(CO)_3$(dppb)(CH_3CN), **662**, 51
Synthesis, characterization and theoretical studies of new heterometallic carbonyl clusters bridged by 4,4′-dipyridyl unit, **655**, 39
Synthesis of bis(pyrazol-1-yl)methanes with organogermyl and organosilyl groups on the methine carbon and their reaction with $W(CO)_5(THF)$. X-ray crystal structures of $Ph_3GeCHPz_2W(CO)_4$ and $Me_3SiCHPz_2W(CO)_4$ (Pz = 3,5-dimethylpyrazole), **658**, 198
Synthesis of new half sandwich tetrachloro derivatives of molybdenum(V) and tungsten(V). X-ray structures of $(C_5HPr^i_4)W(CO)_3(CH_3)$ and $(C_5Et_5)WCl_4$, **654**, 109
The metal–carbon bond in vinylidene, carbonyl, isocyanide and ethylene complexes, **661**, 181
Theoretical analysis of bis(ethylene) complexes of molybdenum and tungsten, **663**, 83
The syntheses and structures of coordinatively unsaturated aryloxyhydride complexes of molybdenum, $Mo(PMe_3)_4(OAr)H$: reversible C–H bond activation and comparison with their tungsten analogues, **652**, 37
Tripodal triphos $\{MeC(CH_2PPh_2)_3\}$ complexes of molybdenum(II) and tungsten(II). Reactions of $[MI_2(CO)_3\{MeC(CH_2PPh_2)_3\text{-}P,P'\}]$ (M = Mo or W) with molybdenum(II) and tungsten(II) complexes, **648**, 99
Tungsten carbonyl
The catalytic synthesis of thiacrowns from thiiranes by Group VI and VII transition metal carbonyl complexes, **652**, 51
Tungsten complex
Syntheses and structures of $(R_2Bi)_2E$ (E = S, Te) and *cyclo*-$(RSbSe)_2[W(CO)_5]_2$ [R = $CH(SiMe_3)_2$], **664**, 130
Tungsten complexes
The first carbene-*C*,*N* chelate tetracarbonyl dihalogeno and carbene-*C*,*O* chelate tetracarbonyl benzochinone tungsten complexes, **651**, 66
Tungsten hexacarbonyl
Synthesis of conjugated polymers with ferrocene units as pendants or as end-groups, **645**, 27
Tungsten(II)
3,3-Dimethyl-1-butyne complexes of tungsten(II). Crystal structures of $[WI_2(CO)(NCPh)(\eta^2\text{-}HC_2Bu^t)_2]$ and $[WI_2(CO)\{P(OR)_3\}_2(\eta^2\text{-}HC_2Bu^t)]$ (R = Me and Et), **658**, 77
Nitrile exchange reactions of $[WI(CO)(NCMe)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$; X-ray crystal structures of $[WI(CO)(L)\{P(O^iPr)_3\}_2(\eta^2\text{-}MeC_2Me)][BPh_4]$ {L = NC^iPr, NC^tBu, $NCCH_2Ph$, 1,2-$C_6H_4(NCCH_2)_2$}, **664**, 37
Turnover frequency
Density functional investigation of incorporation of functional additives to neutral salicylaldiminato Ni(II) polymerization catalyst, **654**, 132
π-Tweezer
Synthesis and electrochemical behaviour of σ,η^2-acetylide-bridged early–late complexes;: The solid-state structure of $[(\eta^5\text{-}C_5H_4SiMe_3)_2Ti(C{\equiv}CSiMe_3)_2]Pd(PPh_3)$, **664**, 123
Twisted boat conformations
Molecular structures of trimeric diphenyltin chalcogenides, $(Ph_2SnE)_3$, E = S, Se, Te, **660**, 43

β,γ-Unsaturated esters
Iridium complex-catalyzed carbonylation of allylic phosphates, **651**, 137
Unsymmetrical disubstituted ferrocenes
Synthesis of unsymmetrical 1,1′-disubstituted ferrocenes. Formation of ferrocenophanes via intramolecular cycloaddition, **654**, 117
Uranium
The first mixed cyclooctatetraenyl-phospholyl metal complexes. Crystal structure of $[U(\eta\text{-}C_8H_8)(\eta\text{-}C_4Me_4P)(BH_4)(OC_4H_8)]$, **643-644**, 209
Ureas
Molecular construction based on icosahedral carboranes and aromatic *N*,*N*′-dimethylurea groups. Aromatic layered molecules and a transition metal complex, **657**, 48
UV spectra
Synthesis and UV spectra of 8-mercaptoquinoline organosilicon derivatives and their metal halides complexes, **642**, 91
UV spectrum
First siloxane tethered paracyclophane, **646**, 167
UV-spectrum
Transition metal mediated routes to poly(arylphosphine)s: investigation of novel phosphorus containing conjugated polymers, **653**, 167
UV–vis absorption spectra
A new approach to photophysical properties control of main group

element π-electron compounds based on the coordination number change, **652**, 3
Cross-coupling reactions in the chemistry of silole-containing π-conjugated oligomers and polymers, **653**, 223
The coordination number–photophysical properties relationship of trianthrylphosphorus compounds: doubly locked fluorescence of anthryl groups, **646**, 277
UV–vis spectroelectrochemical data
Synthesis, physicochemical and electrochemical properties of metal–metal bonded ruthenium corrole homodimers, **652**, 69

Vanadium
Transition metal-catalyzed oxidations of bishomoallylic alcohols, **661**, 67
Vanadium(II)
Lithiation of ferrocenylamines and vanadium dinitrogen chemistry, **664**, 245
Variable-temperature NMR
Rhodium complexes of 3,4-di(β-naphthyl)-2,5-diarylcyclopentadienone: indirect detection of slowed naphthyl rotation, **656**, 243
Vertical ionization energies
Structure–property relationships in phosphole oligomers: a theoretical insight, **643-644**, 194
Vibrational spectra
A new method for assigning the C–O stretching bands in *cis*-disubstituted octahedral metal carbonyl complexes, **660**, 116
Vibrational spectroscopy
Characterization of a metallocene/co-catalyst system supported on silica by Fourier-Transform Raman spectroscopy, **651**, 80
Vibrational spectroscopic and force field studies of $(\eta^5\text{-Cp})ML_3$-type complexes (M = Mn, Re; L = CO, O), **642**, 246
Vilsmeier
The synthesis and characterization of 1-formyl-2-acylcyclopentadienylthallium compounds, **642**, 268
Vinyl
Reactivity of osmium–rhodium mixed-metal cluster $[Os_3Rh(\mu\text{-}H)_3(CO)_{12}]$ towards vinyl containing ligands, **659**, 151
Vinylarsine
Enantioselective synthesis of a conformationally rigid, sterically encumbered, 2-arsino-7-phosphanorbornene, **643-644**, 136
Vinylboronate ester
Rhodium(I) catalysed diboration of (*E*)-styrylboronate esters: molecular structures of (*E*)-*p*-MeO–C_6H_4–CH=CH–B(1,2-$O_2C_6H_4$) and *p*-MeO–C_6H_4–$CH_2C\{B(1,2\text{-}O_2C_6H_4)\}_3$, **652**, 77
Vinyl complex
Why propene is not polymerized by $(Cp^*_2YH)_2$: reactions of yttrium alkyl complexes with alkenes produce allyl and vinyl yttrium complexes, **663**, 91
Vinyl ether
Ligand effect on the cationic palladium complexes in polymerization of vinyl ethers, **656**, 199
Vinylidene
Synthesis of 2-pyranylidene or (2-furyl)carbene–chromium complexes from conjugated enyne carbonyl compounds with $Cr(CO)_5(THF)$, **645**, 228
Vinylidene complexes
A tertiary phosphine that is too bulky: preparation of catalytically less active carbene and vinylidene ruthenium(II) complexes, **641**, 203
The metal–carbon bond in vinylidene, carbonyl, isocyanide and ethylene complexes, **661**, 181
Vinylidene ligands
Acid controlled alkyne dimerisation initiated by a Ru–carbene precursor, **659**, 159
Vinyl iodides
A convergent total synthesis of pumiliotoxins A and B via palladium-catalyzed cross-coupling reaction of homoallylic organozinc compounds with vinyl iodides, **653**, 229
Vinylstannanes
Stereoselective hydrostannation of substituted alkynes with trineophyltin hydride, **650**, 173

Water
Green organometallic chemistry: $CpFe^+$-induced amination of chloroarenes in water, **643-644**, 125
Weak intermolecular interactions
The use of Kitaigorodskii's *Aufbau* principle in the solid-state study of crystalline borane compounds. A preliminary account, **657**, 20
Weakly coordinating anions
Cobaltabisdicarbollide anion $[Co(C_2B_9H_{11})_2]^-$ as doping agent on intelligent membranes for ion capture, **657**, 239
Wittig olefination
Chiral arene ruthenium complexes: Part 3. [Ruthenium(η^6-arene)(η^4-1,5-cyclooctadiene)] complexes with N or O donor functions in the arene side chain, **641**, 90

X-ray
η^1-Alkynylplatinum(II) complexes with cycloocta-1,5-diene and tri(1-cyclohepta-2,4,6-trienyl)phosphane ligands, **641**, 173
Carbon–silicon hyperconjugation: X-ray structural study of *N*-methyl-4-trimethylsilylmethylpyridinium triflate, **659**, 10
From bis(silylamino)tin dichlorides via di(1-alkynyl)-bis(silylamino)tin to new heterocycles by 1,1-organoboration, **649**, 232
Hexa(1-alkynyl)disilanes. Synthesis, structure and 1,1-ethylboration, **656**, 97
New complexes of palladium(II) with chelating heterocyclic nitrogen ligands. Characterization and catalytic activity in CO–styrene copolymerization. Crystal structure of $[Pd(bipy)_2][BAr'_4]_2$, Ar′ = [3,5-$(CF_3)_2C_6H_3$], **664**, 77
New N- and O-donor ligand environments in organoscandium chemistry, **647**, 145
Reactions of dirhenium heptoxide with manganese(I) and rhenium(I) hydrido, alkoxo, methylcarbonato, carbonato-bridged, and methoxymethyl complexes. The X-ray structures of *fac*-$(CO)_3$(dppp)$MnOReO_3$ and *fac*-$(CO)_3$(dppp)$ReOReO_3$, **658**, 88
Silyl derivatives of ferrocene with pending indenyl or fluorenyl substituents at silicon, **656**, 71
Synthesis, structure and reactivity study of 1,1′-bis(*N*-*ter*-butyl-*N*-hydroxyamino)ferrocene, **654**, 210
The synthesis and structural characterization of some triorganotin(IV) complexes of 2-{[(*E*)-1-(2-hydroxyaryl)alkylidene]amino}acetic acid. Crystal and molecular structures of $Ph_3Sn(2\text{-}OHC_6H_4C(H)=NCH_2COO)$ and $Me_3Sn(2\text{-}OHC_6H_4C(CH_3)=NCH_2COO)$, **654**, 100
Triorganoantimony(V) complexes with internally functionallized oximes: synthetic, spectroscopic and structural aspects of $[R_3Sb(Br)L]$, $[R_3Sb(OH)L]$ and $[R_3SbL_2]$, crystal and molecular structures of $[Me_3Sb\{ON=C(Me)C_4H_3O\}_2]$, $[Me_3Sb\{ON=C(Me)C_4H_3S\}_2]$, 2-$OC_4H_3C(Me)=NOH$ and 2-$SC_4H_3C(Me)=NOH$, **645**, 118
X-ray absorption spectroscopy
Synthesis, X-ray absorption spectroscopy and purification of the seleno-bis (*s*-glutathionyl) arsinium anion from selenide, arsenite and glutathione, **650**, 108
X-ray analysis
A mixed-valence dimanganese complex synthesized from the $[Ph_2P(O)NP(O)Ph_2]^-$ anion with $[BrMn(CO)_5]$, **645**, 54
Stereomutation and apicophilicity of diastereomeric spirophosphoranes (10-P-5), **643-644**, 441
Synthesis of a novel copper(II) complex and its crystal structure, **650**, 274

X-ray crystallographic analysis
Synthesis and structure of the first pentacoordinate thiasiliranides, **643-644**, 504
X-ray crystallography
A comparison of the ligating properties of the mixed P/O- and P/S-donor ligands $Ph_2P(CH_2)_2O(CH_2)_2O(CH_2)_2PPh_2$ and $Ph_2P(CH_2)_2S(CH_2)_2S(CH_2)_2PPh_2$ with Group 6 and 7 carbonyls, **655**, 55
Aluminum, gallium and copper complexes of 2,2-dimethyl-1,3-propanediamine, **643-644**, 53
A novel route for the preparation of dimeric tetraorganodistannoxanes, **659**, 73
C–Br versus C–H bond activation in palladium(II) cyclopalladated compounds. Crystal and molecular structure of [Pd{$C_6H_4C(H)$=NCy}(MeCOCHCOMe)], **663**, 239
Functionalized cobalt bis(dicarbollide) ions as selective extraction reagents for removal of M^{2+} and M^{3+} cations from nuclear waste, crystal and molecular structures of the [8,8′-μ-$CIP(O)(O)_2$<(1,2-$C_2B_9H_{10})_2$-3,3′-Co]$HN(C_2H_5)_3$ and [8,8′-μ-$Et_2NP(O)(O)_2$<(1,2-$C_2B_9H_{10})_2$-3,3′-Co]$(HN(CH_3)_3)$, **657**, 59
Preparation and structural characterization of six new diorganotin(IV) complexes of the $R_2Sn(SaleanH_2)$ and $R_2Sn(SalceanH_2)$ type (R = Me, ^{n}Bu, Ph), **664**, 188
Rhodium complexes of 3,4-di(β-naphthyl)-2,5-diarylcyclopentadienone: indirect detection of slowed naphthyl rotation, **656**, 243
Stepwise assembly and structural characterization of oligonuclear ferrocene aggregates with boron–nitrogen backbone, **664**, 94
Syntheses of the $B_{(8)}$-hydroxy- and $B_{(8,8')}$-dihydroxy-derivatives of the bis(1,2-dicarbollido)-3-cobalt(1-)ate ion by its reductive acetoxylation and hydroxylation: molecular structure of [8,8′-μ-$CH_3C(O)_2$<(1,2-$C_2B_9H_{10})_2$-3-Co]^0 zwitterion determined by X-ray diffraction analysis, **649**, 181
Synthesis and crystal structures of thermally stable titanocenes, **663**, 134
Synthesis and structural characterisation of the 3,5-di-*tert*-butyl-1,2,4-triphospholyl complexes of monovalent gallium and thallium, [$M(\eta^5-P_3C_2Bu^t_2)$], M = Ga, Tl, **646**, 191
X-ray crystal structure
Azanonaborane-pyridine derivatives [$(R'C_5H_4N)B_8H_{11}NHR''$]: synthesis, structure and some molecular-orbital calculations, **657**, 205
Preparation and properties of dinuclear bis[dicarbonyl(cyclopentadienyl)]diiron(II) complexes with S–S coupled, dimerized sulfur-rich dithiolate ligands, **645**, 94
Studies on the synthesis and structural characterization of cyclomercurated ferrocenylimines containing heterocyclic ring, **660**, 139
Synthesis and reactivity of Group 6 metal carbonyl complexes containing bis(triazol-1-yl)methane: linkage coordination polymers, **642**, 179
Tris(*N*-pyrrolyl)phosphine complexes of osmium(II) and osmium(0), **643-644**, 168
X-ray crystal structure analyses
Structural characterization of Group 4 transition metal halide bis-Arduengo carbene complexes MCl_4L_2: X-ray crystal structure analyses and DFT calculations, **663**, 192
X-ray crystal structures
Syntheses and structures of dimethylamino-bridged bis(silylene)ruthenium and -osmium complexes, **645**, 235
Synthesis and crystal structures of Group 6 metal carbonyl complexes containing S-rich bis(pyrazol-1-yl)methane ligands, **649**, 152
Synthesis of bis(pyrazol-1-yl)methanes with organogermyl and organosilyl groups on the methine carbon and their reaction with $W(CO)_5(THF)$. X-ray crystal structures of $Ph_3GeCHPz_2W(CO)_4$ and $Me_3SiCHPz_2W(CO)_4$ (Pz = 3,5-dimethylpyrazole), **658**, 198
X-ray diffraction
Alkynethiolate ligands in the syntheses of iron carbonyl derivatives. Crystal structure of [$(\eta^5-C_5H_5)Fe(CO)_2(SC{\equiv}CSiMe_3)$], **649**, 21
Chemistry on a metallathiaborane cluster Part 4: reactions of 11-vertex rhodathiaboranes with bidentate phosphines and their subsequent rearrangements, **657**, 40
Cobalt(II) and iron(II) tris(trimethylsilyl)siloxides: synthesis, structure and reactivity, **642**, 20
Imido analogs of aluminophosphates: syntheses and X-ray structures of $\{LiAl[OP(N^tBu)_2(NH^tBu)]_2\}_2$ and the mono- and di-methylaluminum complexes of the anions $[OP(N^tBu)_x(NH^tBu)_{3-x}]^{x-}$ (x = 1, 2), **646**, 107
5-Methylquinoxaline as a versatile mono-, bi- and tridentate ligand in Palladium(II) chemistry. Crystal structures of *trans*-$[Pd(OAc)_2(N1\text{-}C_8H_5N_2Me\text{-}5)_2]$ and [Pd(OAc)(C,N4-$CH_2C_8H_5N_2$-5)(PPh_3)], **648**, 62
Multinuclear NMR and X-ray diffraction study of pentacoordinated siloxane structures derived of pyridine diols, **648**, 280
Oxidation of tetraaryldistibanes: syntheses and crystal structures of diarylantimony oxides and peroxides, $(R_2Sb)_2O$, $(R_2Sb)_4O_6$ and $(R_2SbO)_4(O_2)_2$ (R = Ph, *o*-Tol, *p*-Tol), **648**, 209
Polysubstituted derivatives of 3-(η^5-Cp)-4-SMe_2-3,1,2-$FeC_2B_9H_{10}$. X-ray structure of 3-(η^5-Cp)-4-SMe_2-7,8-$(CF_3COO)_2$-12-HgCl-3,1,2-$FeC_2B_9H_7$, **657**, 171
X-ray diffraction analysis
Synthesis of 'three-petal' carbocyclic systems based on *s-cis*-diferrocenyltrienes, **649**, 86
X-ray diffraction study
The factors controlling the reaction of (2,4,6-triisopropylphenyl) methyl ketone with Ph_3Al and structure of [Ph_2AlO(2,4,6-tri-^{i}Pr-C_6H_2)$C{=}CH_2]_2$, **664**, 136
X-ray molecular structure
Hydroxyferrocene as a prochiral analog of phenols: cyclopalladation of a mixed phosphite ester of hydroxyferrocene, **642**, 236
X-ray structural analysis
Metal π complexes of benzene derivatives: Part 56. (η^6-Fluoranthene)(tricarbonyl)chromium: isomerism and haptotropic equilibration, **641**, 208
X-ray structure
Allyl complexes of molybdenum with Schiff base ligands. The crystal structures of [$MoCl(CO)_2${$N(C_6H_4$-2-OMe)=C(Me)-C_5H_4N}(η^3-C_3H_5)] and [$MoCl(CO)_2${N(Me)=C(Ph)C_5H_4N}-(η^3-C_3H_5)] are described, **660**, 91
A structural isomer of the $[CoFe_3(CO)_{13}]^-$ anion, **645**, 281
Dicationic triple-decker complexes with a bridging boratabenzene ligand, **649**, 136
Dimeric dithiocarbamates of stannolane. An example of the presence of secondary bonds in the formation of an inorganic ring. Molecular and crystal structure of 2-^{n}butyl-2-(dimethyldithiocarbamate)-1,3,2-oxathiastannolane and 2-^{n}butyl-2-(piperidyldithiocarbamate)-1,3,2-oxathiastannolane, **654**, 51
Organodiiron(II)-complexes containing a long conjugated hydrazonato spacer. Synthesis, characterization, electrochemical and structural studies, **660**, 71
Preparation, properties, and reactions of metal-containing heterocycles: Part CVIII. A novel generation of rigid, nanoscaled 1,1′-ferrocenediyl-bridged bis(pyridine), bis(bipyridine), and bis(phenanthroline) ligands, **660**, 78
Reactions of tetraphosphine complex [Mo{*meso-o*-$C_6H_4(PPhCH_2CH_2PPh_2)_2$}$(Ph_2PCH_2CH_2PPh_2)$] with nitrile, CO, and isocyanide, **658**, 106
Silsesquioxane chemistry. Part 10. Silsesquioxane silanolate complexes of samarium and scandium, **647**, 245
Syntheses and crystal structures of a covalent trialkylantimony hydroxo bromide and related trialkylantimony(V) halides, **648**, 33

Synthesis and structure of rhodium complexes with monoanionic carborane ligand [9-SMe_2-7,8-$C_2B_9H_{10}$]$^-$, **657**, 115
Synthesis of new half sandwich tetrachloro derivatives of molybdenum(V) and tungsten(V). X-ray structures of ($C_5HPr^i_4$)W(CO)$_3$(CH_3) and (C_5Et_5)WCl_4, **654**, 109
X-ray structure.
Organomercury derivatives of the 2,4,6-trimercaptotriazine (H_3TMT). X-ray crystal structure of (HgMe)$_3$(TMT), **645**, 101
X-ray structure
Dimeric cyclopalladated azobenzenes: structural differences between 2-hydroxypyridine and 2-mercaptopyridine bridged complexes, **650**, 202
First siloxane tethered paracyclophane, **646**, 167
Syntheses and structures of $(R_2Bi)_2E$ (E = S, Te) and *cyclo*-$(RSbSe)_2[W(CO)_5]_2$ [R = $CH(SiMe_3)_2$], **664**, 130
The reaction of potassium hydridopentacarbonylchromate with acrylates. X-ray structure of [PPN]$^+$[$CH_3CH(COOEt)Cr(CO)_5$]$^-$, **643-644**, 27
X-ray structure analysis
Chromium tricarbonyl complexes with biphenylene as η^6 ligand: synthesis, structure, dynamic behaviour in solid state and thermal η^6,η^6-haptotropic rearrangements. Experimental (NMR) and theoretical (DFT) studies, **656**, 27
Coordination chemistry of polymercuramacrocycles. Complexation of cyclic trimeric perfluoro-*o*-phenylenemercury with neutral oxygeneous Lewis bases, **654**, 123
Polymer immobilized silane bridged metallocene catalysts for ethylene polymerization, **655**, 167
X-ray structure determination
Synthesis, reactivity and structures of diethyldithiophosphate molybdenum complexes: crystal structures of [Mo{η^2-$S_2P(OEt_2)$}$_2$(PhC≡CPh)$_2$] and [Mo(η^3-C_3H_5){η^1-$S_2P(OEt_2)$}(Phen)$(CO)_2$], **658**, 191
X-ray structures
Chemistry of Rh(I) complexes based on mesogenic 3,5-disubstituted pyrazole ligands. X-ray crystal structures of 3,5-di(4-*n*-butoxyphenyl)pyrazole (Hpz^{bp2}) and [Rh(μ-pz^{R2})$(CO)_2]_2$ (R = $C_6H_4OC_nH_{2n+1}$, *n* = 10, 12) compounds. Part II, **654**, 150
Complexation of *N*-heterocyclic silylenes to Pd(0): formation of highly labile homoleptic complexes Pd[Si(^{t}BuNCH$_2$CH$_2$N^{t}Bu)]$_4$ and Pd[Si(^{t}BuNCHCHN^{t}Bu)]$_3$, **649**, 141
Lithiation of ferrocenylamines and vanadium dinitrogen chemistry, **664**, 245
Macropolyhedral boron-containing cluster chemistry: Models for intermediates en route to globular and discoidal megaloborane assemblies. Structures of [*nido*-$B_{10}H_{12}$(*nido*-B_5H_8)$_2$] and [($CH_2CH_2C_5H_4N$)-*arachno*-$B_{10}H_{10}$(NC_5H_4-*closo*-$C_2B_{10}H_{10}$)] as determined by synchrotron X-ray diffraction analysis, **657**, 256
Observation of inter- and intramolecular C–H···F hydrogen bonding in Gingras' salt: [*n*-Bu_4N]$^+$[Ph_3SnF_2]$^-$, **648**, 204
Polyhedral monocarbaborane chemistry: The C,B-*para*-diphenyl monocarbadodecaborane anion [1,12-Ph_2-*closo*-1-$CB_{11}H_{10}$]$^-$, **657**, 176
Polyhedral monocarbaborane chemistry: The *closo*-[$PhCB_7H_7$]$^-$ and *closo*-[$PhCB_{10}H_{10}$]$^-$ anions: the two missing species in the *closo*-[$PhCB_nH_n$]$^-$ sequence, **657**, 180
Ruthenium cluster carbonyls containing ligands derived from ferrocenylalkynes, **650**, 188
Si–*C* bond cleavage in the reaction of gallium chloride with lithium bis(trimethylsilyl)amide and thermolysis of base adducts of dichloro(trimethylsilyl)amido gallium compounds, **649**, 268
Syntheses and structural characterization of transition metal tetrahedral clusters (η^5-RC_5H_4)$(CO)_8MoRu_2H(\mu_3$-S) and [(η^5-RC_5H_4)$(CO)_4MoRu(\mu_3$-S)]$_2$ generated by isolobal reactions, **656**, 228
Synthesis and crystal structure of *N*-heterocyclic carbene complex of silver, **654**, 233
Synthesis and molecular structures of dimeric assemblies of telluronium salts derived from *o*-$C_6H_4(CH_2TeMe)_2$ and PhMeTe, **642**, 186
Synthesis and structural characterization of novel bridged platinum(II) biscarbene complexes, **660**, 121
Synthesis and structures of crystalline bis(trimethylsilyl)methanido complexes of potassium, calcium and ytterbium, **663**, 263
Synthesis, spectroscopic and structural aspects of some tetraorganodistannoxanes with internally functionalized oxime: crystal and molecular structures of [{$R_2Sn(ON=C(Me)py)$}$_2O]_2$ (R = Bu^n and Et) and 2-$NC_5H_4C(Me)=NOH$, **651**, 98
Water soluble phosphines: Part XV. Syntheses of multiply functionalized and chiral phosphine ligands by Pd-catalyzed P–C and C–C coupling reactions, **645**, 14
X-ray analysis and structural characterization of 2-phenyl-6-aza-1,3-dioxa-2-borabenzocyclononenones, **657**, 194
X-ray study
Homochiral cyclopalladated complexes of (*S*)-4-*tert*-butyl-2-phenyl-2-oxazoline. X-ray study of (*S*,*S*)-di-μ-chlorobis-{2-[2-(4-*tert*-butyl)oxazolinyl]phenyl-*C*,*N*}dipalladium(II), **654**, 66

Ynephosphine
Tandem eneyne-phosphaallene/Myers type cyclization via base-induced isomerisation of enediynephosphine, **643-644**, 342
Ytterbium
Organolanthanides RLnX (R is alkyl, aryl, X is halogen) and lanthanide complexes with aromatic hydrocarbon dianions: synthesis, structure, and reactivity, **647**, 21
Synthesis and characterization of $(C_5H_9C_9H_6)_2Yb(THF)_2$(II) (**1**) and [$(C_5H_9C_5H_4)_2Yb(THF)]_2O_2$ (**2**), and ring-opening polymerization of lactones with **1**, **650**, 84
Ytterbium(II)
Synthesis and structures of crystalline bis(trimethylsilyl)methanido complexes of potassium, calcium and ytterbium, **663**, 263
[($Tp^{t\text{-}Bu,Me}$)Yb(μ-H)]$_2$: a fecund precursor to a host of divalent, hydrotris(pyrazolyl)borate supported f-element complexes, **647**, 84
Ytterbium(II) amides
Ytterbium(II) amides and crown ethers: addition versus amide substitution, **647**, 198
Yttrium
Cyclopentadienyl complexes of yttrium and the lanthanides with bis(phosphinimino)methanides, **647**, 123
Metalation of aromatic heterocycles by yttrium alkyl complexes that contain a linked amido-cyclopentadienyl ligand: synthesis, structure and Lewis base adduct formation, **647**, 158
Organolanthanides RLnX (R is alkyl, aryl, X is halogen) and lanthanide complexes with aromatic hydrocarbon dianions: synthesis, structure, and reactivity, **647**, 21
β-SiH agostic bonding in sterically crowded lanthanidocene silylamide complexes, **647**, 236
Synthesis, structure and catalytic activity of new iminophenolato complexes of scandium and yttrium, **663**, 63

Zeolites
From homogeneous to heterogeneous catalysis: zeolite supported metal complexes with C_2-multidentate nitrogen ligands. Application as catalysts for olefin hydrogenation and cyclopropanation reactions, **655**, 134
Zinc
Combining organometallic and Werner-type coordination sites in highly preorganized heterobimetallic systems, **641**, 113
Preparation of 2-arylated-1,4-phenylenediamines by palladium-catalyzed cross-coupling reactions, **653**, 122

Synthesis and characterization of monodisperse zinc and zinc oxide nanoparticles from the organometallic precursor $[Zn(C_6H_{11})_2]$, **643-644**, 307
Zinc bromide
Direct synthesis of unsaturated β-amino acids, **662**, 172
Zinc oxide
Synthesis and characterization of monodisperse zinc and zinc oxide nanoparticles from the organometallic precursor $[Zn(C_6H_{11})_2]$, **643-644**, 307
Zirconacyclopentanes
Zirconocene mediated cyclization and isomerization of 1,3,6-heptatriene, **663**, 13
Zirconium
Bis(2-*N*,*N*′-methylpiperazinoindenyl)zirconium dichloride. Crystal structure of bis(2-*N*,*N*′-methylpiperazinoindenyl)$ZrCl_2$, **659**, 64
Dinuclear zirconium complexes containing the fulvalene ligand. Synthesis and reactivity, **645**, 112
Niobium, titanium, zirconium and hafnium complexes incorporating germanium bridged *ansa* ligands. X-Ray crystal structures of $[Zr\{Me_2Ge(\eta^5\text{-}C_5Me_4)_2\}Cl_2]$ and $[M\{Me_2Ge(\eta^5\text{-}C_5Me_4)(\eta^5\text{-}C_5H_4)\}Cl_2]$ (M = Zr, Hf), **656**, 129
Novel 2-indenyl *ansa*-zirconocenes for the polymerization of α-olefins, **654**, 29
Solution structure and decomposition pathway of zwitterionic zirconium (IV) benzyl complexes, **658**, 1
Specific solvent effect on R_2ZrCl_2 (R = butyl, ethyl) reactivity, a density functional study, **664**, 268
Synthesis and crystal structure of highly soluble ansa-titano- and zirconocene dichloride complexes $[Me_2Si(\eta^5\text{-}C_5H_2(SiMe_3)_2]_2MCl_2$ (M = Ti, Zr), **649**, 15
Synthesis, molecular structure, and polymerization reactivity of ethylenebis(1,3-dimethylcyclopentadienyl)zirconium dichloride, **660**, 161
Synthesis of zirconocene amides and ketimides and an investigation into their ethylene polymerization activity, **656**, 63
Synthesis, structure and polymerization catalytic properties of doubly bridged bis(cyclopentadienyl) dinuclear titanium and zirconium complexes, **645**, 212
Zirconium bis-indenyl compounds. The influence of substituents on the ethene polymerization behavior of 1- and 2-substituted $(R\text{-}Ind)_2ZrCl_2$/MAO catalysts, **642**, 195
Zirconium alkyls
Preparation of Ti(IV), Zr(IV) and Sn(IV) metal alkyls containing the $(Pr^iO)_3SiCH_2$ fragment, **663**, 256
Zirconium cation
Observation of non-chelated bis(pentamethylcyclopentadienyl)zirconium-alkyl–alkene complexes is thwarted by competitive arene or amine coordination or by β-hydride elimination, **642**, 120
Zirconium complexes
1,4-Diaza-1,3-diene (DAD) complexes of early transition metals. Synthesis and structural characterization of (*t*-Bu-DAD)$ZrCl(\mu\text{-}Cl)_3Zr$(*t*-Bu-DAD)(THF) and its reaction with benzophenone, **648**, 87
Zirconocene compounds derived from boratastilbene, 4-boratastyrylstilbene, and 1,4-bis(boratastyryl)benzene and their reactivities to the ethylene polymerization, **642**, 275
Zirconocene
Characterization of a metallocene/co-catalyst system supported on silica by Fourier-Transform Raman spectroscopy, **651**, 80
Synthesis and characterization of planarly chiral nonbridged bis(1-*R*-indenyl) zirconium dichloride complexes and X-ray structure of *rac*-$[(\eta^5\text{-}C_9H_6\text{-}1\text{-}C(CH_3)_2\text{-}o\text{-}C_6H_4\text{-}OCH_3)_2ZrCl_2]\cdot THF$, **650**, 114
Synthesis, structures and polymerization catalytic properties of germyl-bridged bis(cyclopentadienyl) metallocenes, **645**, 262
Zirconocene cation complexes
Synthesis of dimetallic μ-alkylideneamido zirconocene dications by a thermodynamically favorable lithium chloride elimination pathway, **643-644**, 61
Zirconocene cations
The reaction of $Cp^*_2ZrMe_2$ with $[CPh_3][B(C_6F_5)_4]$: triphenylethane does *not* form η^n-arene complexes with $[Cp^*_2ZrMe]^+$, **654**, 221
Zirconocene complexes
Synthesis and structural characterization of $[H(OEt_2)_2]^+[(C_3H_3N_2)\{B(C_6F_5)_3\}_2]^-$ — a Brønsted acid with an imidazole-derived 'non-coordinating' anion, **641**, 148
Synthesis of novel metallacyclic zirconocene complexes from ω-alkenyl-functionalized zirconocene dichloride complexes and their use in the α-olefin polymerization, **648**, 134
Zirconocene dichloride
Synthesis and cyclic voltammetry of 1,2,3-trisubstituted bis(cyclopentadienyl)zirconium dichlorides, **658**, 242
Zwitterionic clusters
Recent studies on $RR'S\cdot C_2B_9H_{11}$ charge-compensated ligands: Crystal structures of 10-$(S(CH_3)_2)$-7,8-$C_2B_9H_{11}$ and 10-$(S(CH_2)_4)$-7,8-$C_2B_9H_{11}$, **657**, 247
Zwitterionic complexes
Solution structure and decomposition pathway of zwitterionic zirconium (IV) benzyl complexes, **658**, 1
Zwitterionic pentacoordinate silicate
Octakis[(2,2,6,6-tetramethylpiperidino)methyl]octasilsesquioxane: synthesis and crystal structure analysis of a new aminoorganyl-functionalized octasilsesquioxane, **646**, 200
Zwitterions
Alkylderivatives of Stanna-*closo*-dodecaborate, **664**, 116
Zwitterion synthon
Recent advances on the synthetic applications of the dithioacetal functionality, **653**, 209

AUTHORS

If you want to make the best of your artwork send it in the correct digital format

All articles accepted for publication in Elsevier Science journals are processed using electronic production methods. Authors should therefore ensure that their artwork conforms to the following guidelines:

- **Colour and greyscale images** should be supplied as **TIFF** or **EPS** files (resolution 300 dpi).
- **Line drawings (black & white or colour)** should be supplied as **EPS** files

If you need help to create files in these formats, go to
www.elsevier.com/locate/authorartwork/formats

Please also note:

- We still need a good quality hard copy of each figure in case the electronic file cannot be used. The hard copy and electronic file must match exactly.
- We can use floppy disks, ZIP disks or CD-ROM. Artwork files should be on a separate disk or CD to article text files.
  www.elsevier.com/locate/authorartwork/media
- Only standard fonts should be used, for example:
  Times, Times New Roman, Helvetica, Arial, Symbol
  www.elsevier.com/locate/authorartwork/formats
- Lines should be a minimum width of 0.5 pt.
  www.elsevier.com/locate/authorartwork/linewidth
- Only standard colours should be used.
  www.elsevier.com/locate/authorartwork/colours
- Lettering should be a consistent size and appropriate to the size of the figure.
  www.elsevier.com/locate/authorartwork/sizing
- An image which looks acceptable on a computer may not reproduce well, so it is important to ensure that these guidelines are followed.

Our Author Artwork website has all the information you need on how to submit your artwork correctly. Visit it today at:

www.elsevier.com/locate/authorartwork

ELSEVIER | NORTH HOLLAND | PERGAMON

find
submit
track
alerts
personalise

authorGATEWAY
from Elsevier Science

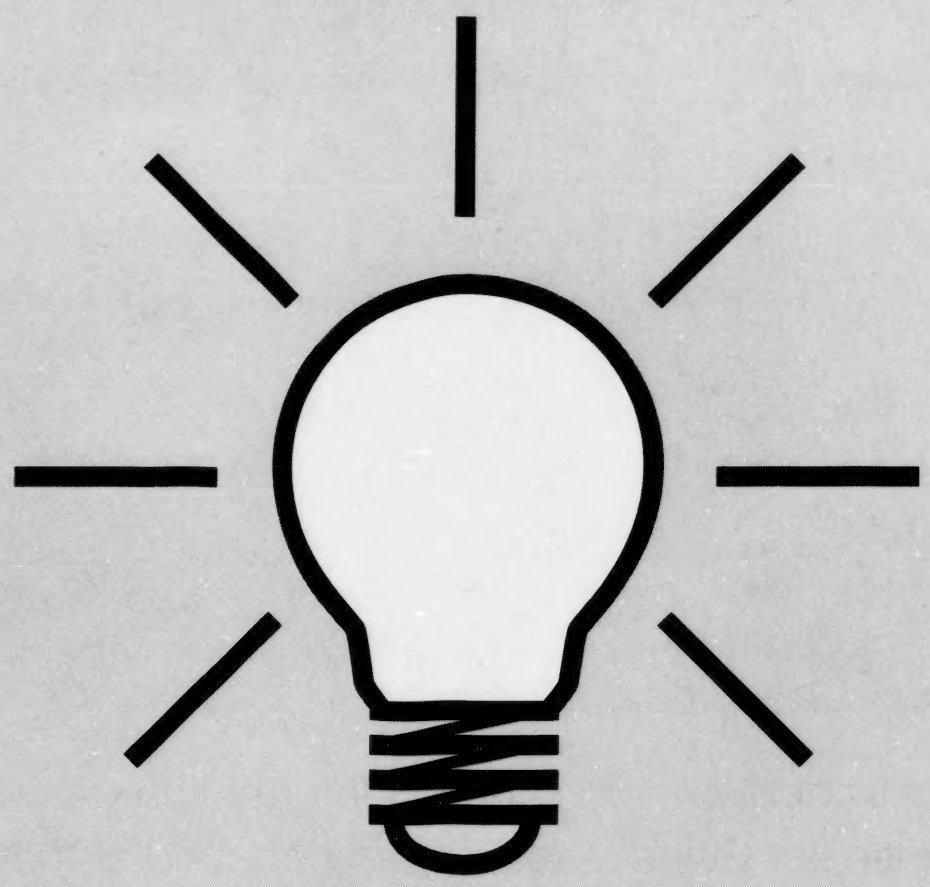
The integrated online entry point for all your submission needs

- Find your journal - search by title, keyword or editor; browse by subject area or title.
- Submit your paper - access comprehensive instructions about getting published, including online submission where available.
- Track your paper - track the status of your paper from acceptance to publication (this service was formerly known as OASIS)
- Set up alerts for your favourite journals - receive tables of contents by email from ContentsDirect.
- Personalise your homepage - create your own unique homepage with quick links to your papers, journals and email alerts.

http://authors.elsevier.com
helping you get published

For more information about the Author Gateway contact Author Support at: **authorsupport@elsevier.com**

Don't be left in the dark



Bright ideas. Powered by Scirus

Finding relevant scientific data on the Web can prove difficult. Generic search engines show up many irrelevant results and it's easy to miss out on key information. So that you are not left in the dark, Elsevier Science has developed a guiding light – Scirus, a search engine specifically designed for scientists. It helps you easily locate high-quality scientific information by illuminating only those sites and journal databases with scientific content.

Scirus lights the path to key scientific information because it:

- Targets scientific information only
- Covers over 100 million science-related pages
- Finds the most peer-reviewed articles
- Offers unique search functionalities
- Won Best Specialty Search Engine Award

SCIRUS
www.scirus.com

Scirus - the Web search engine dedicated to science

Scirus is developed by Elsevier Science as part of the ScienceDirect® family of products.

tetrahedron.info

LEADING ORGANIC CHEMISTRY RESEARCH

tetrahedron.info is a new information gateway from Elsevier Science for researchers and authors in the organic chemistry community

Visit us today for:

- Access to thousands of FREE abstracts online
- Online access to full text articles via ScienceDirect®.
- FREE feature articles
- Free access to *Combinatorial Chemistry: An Online Journal*
- Search functionality across journals
- Comprehensive listings of *Symposia-in-Print* and *Reports*
- Information on the renowned *Tetrahedron Prize* and *Tetrahedron Chair*
- News and events (including the 2003 Tetrahedron Symposium)
- New and forthcoming books - special offers!

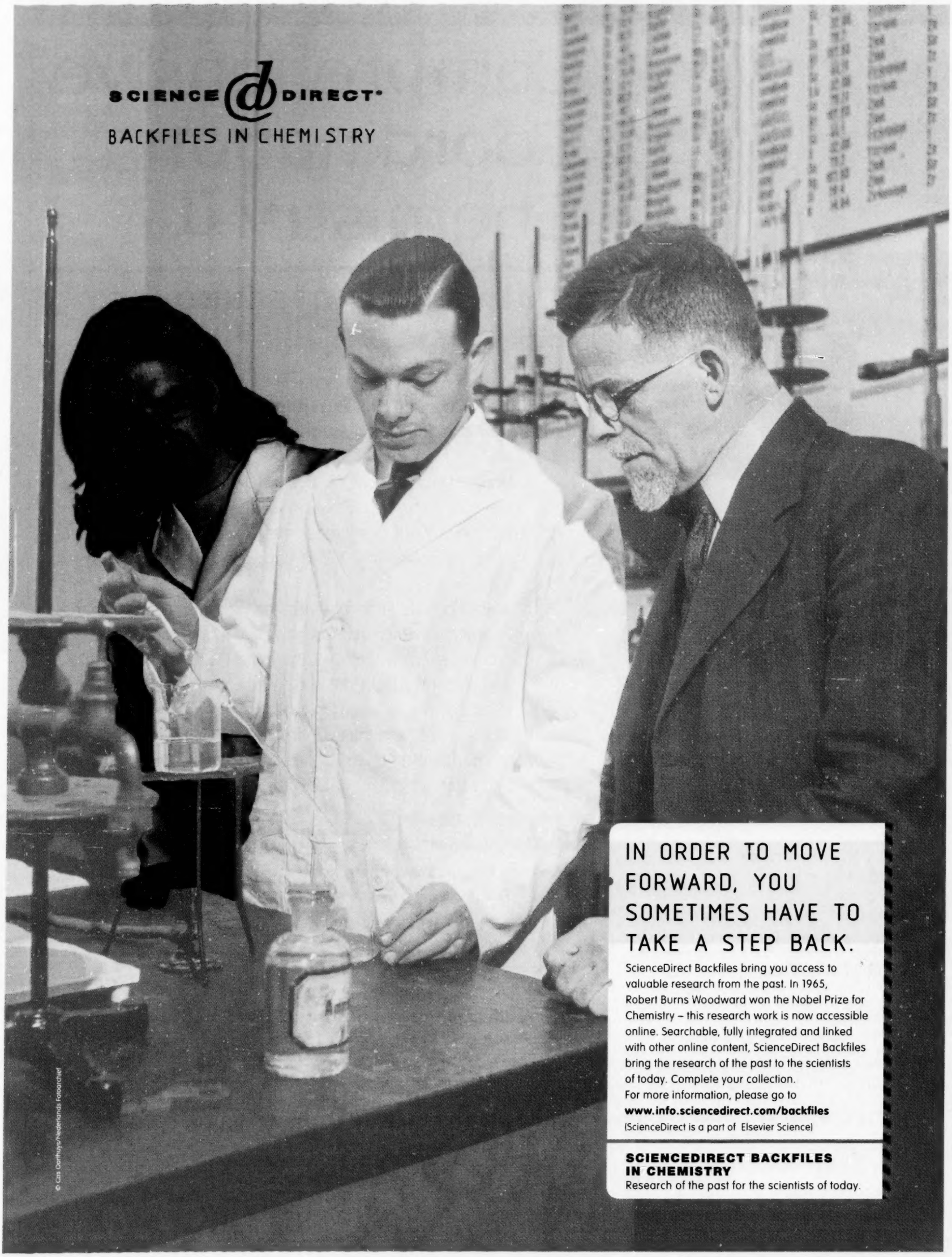
* *Available to ScienceDirect ® customers, Web Editions licencees, or by Pay Per View*

2003 Tetrahedron Symposium
18 July 2003
St Hilda's College
University of Oxford, UK
Find out more at
www.**tetrahedron**.info

...all now available via

www.**tetrahedron**.info

SCIENCE DIRECT®
BACKFILES IN CHEMISTRY



© Cas Oorthuys/Nederlands Fotoarchief

IN ORDER TO MOVE FORWARD, YOU SOMETIMES HAVE TO TAKE A STEP BACK.

ScienceDirect Backfiles bring you access to valuable research from the past. In 1965, Robert Burns Woodward won the Nobel Prize for Chemistry – this research work is now accessible online. Searchable, fully integrated and linked with other online content, ScienceDirect Backfiles bring the research of the past to the scientists of today. Complete your collection.
For more information, please go to
www.info.sciencedirect.com/backfiles
(ScienceDirect is a part of Elsevier Science)

SCIENCEDIRECT BACKFILES IN CHEMISTRY
Research of the past for the scientists of today.

FORTHCOMING SPRING 2003

SAVE 25%
Order by March 2003

Comprehensive Coordination Chemistry II

10-VOLUME SET

FROM BIOLOGY TO NANOTECHNOLOGY

A comprehensive review of research in the field of Coordination Chemistry...Providing readers with an unparalleled depth of coverage.

Under the chief editorship of Jon McCleverty and Thomas Meyer, we are pleased to announce the forthcoming reference work *Comprehensive Coordination Chemistry II*, to be published in 2003 in both print and online formats.

This second edition of what has become a classic in the field, *Comprehensive Coordination Chemistry*, is a completely new work. Containing 70 new chapters, its aim is to give both the specialist and non-specialist chemist, in academia and industrial and government laboratories, a clear overview of the major developments in coordination chemistry since the early 1980s and the likely impact of this field in the next 10 years.

EDITORS-IN-CHIEF
J. McCleverty
University of Bristol, UK
T.J. Meyer
Los Alamos National Laboratory, NM, USA

CCCII INCLUDES:
- 70 chapters
- c. 8000 pages
- over 15,000 chemical structures
- c. 30000 references
- ISBN: 0-08-043748-6

FIND OUT MORE...

Keep up-to-date with developments on CCC II by visiting the website. For complete volume and chapter listings, and to sign up for free e-mail alerts visit **www.ccc2.info**

SAVE 25% - On 10-volume hardbound set orders placed before 31 March 2003.
Pre-publication price: EUR 4725 / USD 4500
Regular price: EUR 6274 / USD 5975
(Applies to orders received after March 2003)

ORDER NOW! – PLACE YOUR ORDER WITH YOUR USUAL BOOKSELLER OR CONTACT:

PERGAMON
An imprint of Elsevier Science

Customers in the Americas
Elsevier Science
P.O. Box 945, New York, NY 10159-0945, USA
Tel: (+1) 212 633 3730. Toll-free for customers in the USA and Canada: 1-888-437-4636
Fax: (+1) 212 633 3680 E-mail: usinfo-f@elsevier.com

Customers in other locations
Elsevier Science
P.O. Box 211, 1000 AE Amsterdam
The Netherlands
Tel: (+ 31) 20 485 3757 Fax: (+31) 20 485 3432
E-mail: nlinfo-f@elsevier.nl

Guide for Authors

Submission of papers

Authors are encouraged to submit their papers electronically directly to the appropriate Regional Editor by using online article submission. Click on www.elsubmit.com/esubmit/jom. Alternatively authors can submit a disk together with **four** copies of their manuscript (complete in all respects) to one of the Regional Editors.

Regional Editors

Professor R.D. Adams, Department of Chemistry and Biochemistry, University of South Carolina, Columbia, SC 29208, USA.

Professor G. Bertrand, Université Paul Sabatier, Hétéro-Chimie Fondamentale et Appliquée, 118, Route de Narbonne, F-31062 Toulouse Cedex 04, France.

Professor W.A. Herrmann, Institut für Anorganische Chemie, Technische Universität München, Lichtenbergstrasse 4, D-85747 Garching, Germany.

Professor D.M.P. Mingos, F.R.S., The Principal's Lodgings, St. Edmund Hall, Queens Lane, Oxford OX1 4AR, UK.

Professor K. Tatsumi, Research Center for Materials Science, Nagoya University, Furo-cho, Chikusa-ku, Nagoya 464-8602, Japan.

Subject Reviews Editor

Professor G. van Koten, Department of Organic (Metal-Mediated) Synthesis, Utrecht University, Transitorium 3, Padualaan 8, NL-3584 CH Utrecht, The Netherlands.

Book Reviews Editor

Professor G.J. Leigh, Department of Chemistry, Physics and Environmental Science, University of Sussex, Brighton BN1 9QJ, UK.

Contributions are accepted on the understanding that authors have obtained the necessary authority for publication. Submission of an article must be accompanied by a statement that the article is original and unpublished and is not being considered for publication elsewhere. Upon acceptance of an article by the Journal, the author(s) will be asked to transfer the copyright of the article to the publisher. This transfer will ensure the widest possible dissemination of information.

Disk preparation

The files should be saved in the native format of the word processing program used. Most popular word processor file formats are acceptable, though we cannot guarantee the usability of all formats. The disk format, word-processor format, file name(s) and the title and authors of the article should be indicated on the disk. The content of the disk must correspond exactly to the hard copy version of the paper.

For specific enquiries on the preparation of electronic artwork, consult http://www.elsevier.com/locate/author-artwork/

Manuscript Preparation

Language. Papers will primarily be published in English. Papers in French or German can also be published, and should have an Abstract in English as well as the Résumé or Zusammenfassung. Authors in Japan please note that upon request, Elsevier Science K.K. will provide a list of people who can check and improve the English of their paper (*before submission*). Please contact our Tokyo office: Elsevier Science K.K., Editorial Service, 1–9–15 Higashi Azabu, Minato-ku, Tokyo 106, Japan; Tel. +81-3-5561-5032; Fax: +81-3-5561-5045; E-mail: info@elsevier.co.jp. Some flexibility of presentation will be allowed, but authors are urged to arrange the subject matter clearly under such headings as *Introduction, Experimental, Results, Discussion*, etc. All contributions should include a concise, informative *Abstract*, and a maximum of six *Keywords*. References should be numbered consecutively throughout the text and should be collected together in a reference list (headed *References*) at the end of the paper. All *equations, tables* and *legends* should be numbered consecutively and separately throughout the paper.

Illustrations. Line drawings should be in a form suitable for reproduction. Illustrations can be printed in colour when they are judged by the Editor to be essential to the presentation. The publisher and the author will each bear part of the extra costs involved. Further information concerning colour illustrations and the costs to the author can be obtained from the publisher.

Graphical Abstract. The contents lists of the Journal of Organometallic Chemistry contain Graphical Abstracts: **pictograms and synopses.** The authors are therefore asked to provide a drawing or reaction scheme (pictogram) illustrating their work and a synopsis of maximum 50 words. The pictogram should measure 55 × 50 mm for direct reproduction. If reduction is needed, please make sure that the illustration is still informative upon reduction.

Proofs

Authors will receive proofs by e-mail (pdf attachment) or fax and are requested to send their corrections as soon as possible. No new material may be inserted in the text at the time of proof-reading. *A Note added in proof* must be dated and the author must have requested and received the Editor's approval.

All articles must indicate the name and full postal address (including **E-mail, telephone and fax numbers**) of the author to whom proofs should be sent.

Offprints

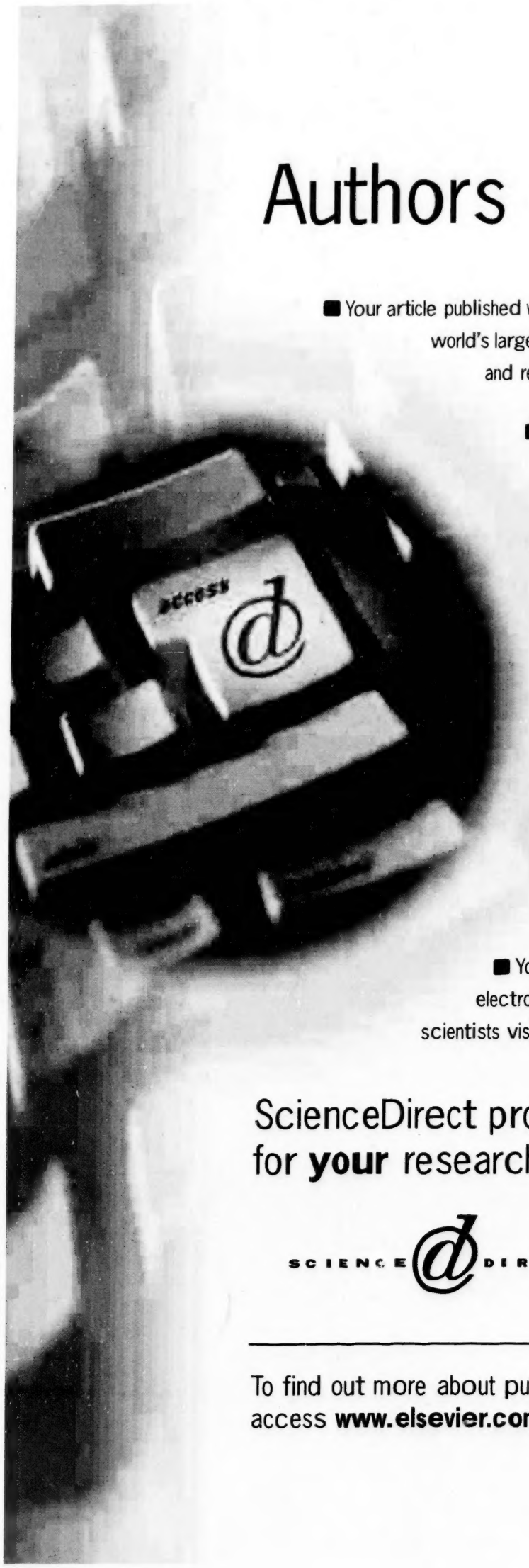
Twenty-five offprints of each paper will be supplied free of charge to the author(s). Additional offprints (minimum 25) may be ordered at prices shown on the offprint order form.

There are no page charges.

Other enquiries

Visit the Author Gateway from Elsevier Science (http://authors.elsevier.com) for the facility to track accepted articles and set up e-mail alerts to inform you of when an article's status has changed. The Author Gateway also provides detailed artwork guidelines, copyright information, frequently asked questions and more.

Contact details for questions arising after acceptance of an article, especially those relating to proofs, are provided when an article is accepted for publication.



Authors did you know...

■ Your article published with Elsevier Science is also included in ScienceDirect, the world's largest scientific network, reaching over 9 million scientists and researchers at **www.sciencedirect.com.**

■ If your institute or organisation currently subscribes to ScienceDirect, you now have access to the full text of those journals in your subscription package at your desktop.

■ ScienceDirect allows you to keep track of citations to your article via e-mail. You can set up a personal profile to ensure you are kept up-to-date with publications in your specialist areas of research.

■ The publication of your article is announced in advance to thousands of registrants to our FREE e-mail alerting service **ContentsDirect**. Find out more by accessing **www.elsevier.com/locate/contentsdirect**

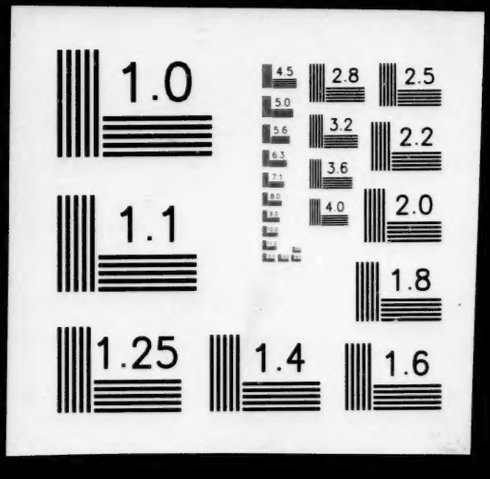
■ Your article will be available in the ScienceDirect electronic archive and as such accessible to the millions of scientists visiting our database for an unlimited period of time.

ScienceDirect provides the articles **you** need for **your** research – **www.sciencedirect.com**

SCIENCE DIRECT® SCIENCE DIRECT® WEB editions

To find out more about publishing your article with Elsevier Science, access **www.elsevier.com/homepage/authors**

0022-328X(20030515)674:I;1-5


1.0
1.1
1.25
1.4
1.6
1.8
2.0
2.2
2.5
2.8
3.2
3.6
4.0
4.5
5.0
5.6
6.3